15c

The OIL WEEKLY

OIL and GAS ENGINEERING

FOR OIL AND GAS PRODUCTION AND PIPE LINE DIVISIONS

THE WEEK'S NEWS INTERPRETED

JANUARY 28, 1935
me 76 Number 7

MOST CONVERSATIONS *about* TOOL JOINT PERFORMANCE BEGIN AND END *with* HUGHES ACME THREAD

FULL HOLE or REGULAR

★

"At Your Supply Store"

THE JOINT THAT *Never* GALLS

HUGHES TOOL COMPANY

SERVICE PLANTS:
LOS ANGELES, CALIF.
OKLAHOMA CITY, OKLA.
MIDLAND, TEXAS

MAIN PLANT AND OFFICE:
HOUSTON,
TEXAS

EXPORT OFFICE:
30 ROCKEFELLER PLAZA
NEW YORK CITY

The

LOWEST COST VALVES

WHEN YOU THINK IN

TERMS OF SERVICE

NORDSTROM *Lubricated Plug* VALVES

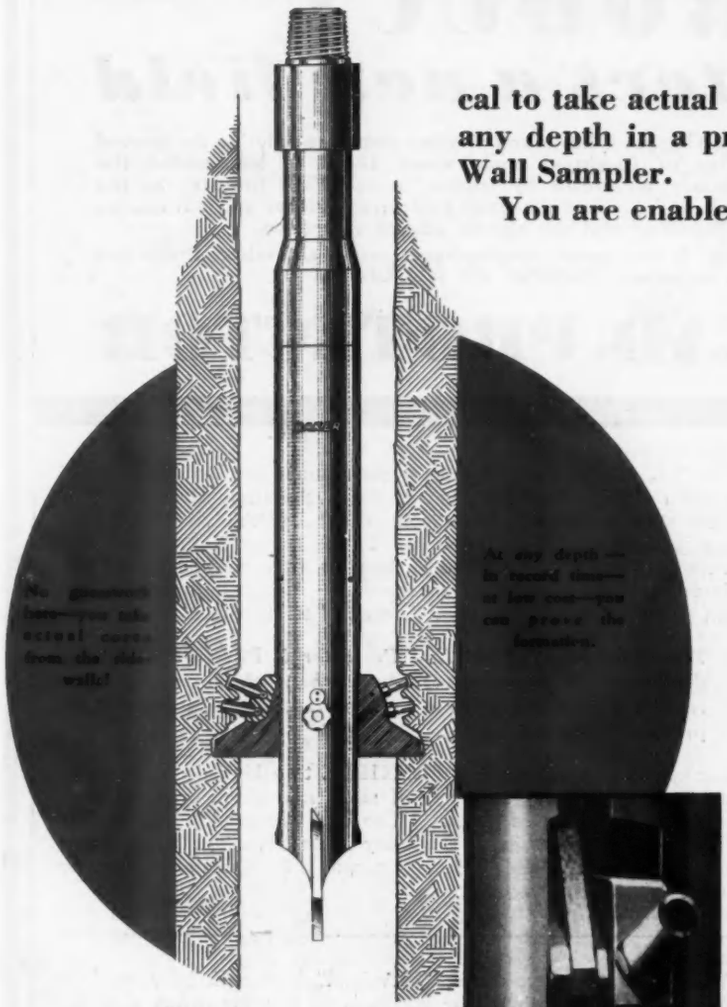
with patented Sealant Injection

MERCO NORDSTROM VALVE COMPANY *A Subsidiary of* **PITTSBURGH EQUITABLE METER CO.**

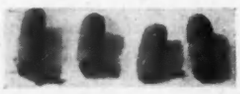
Main Office: Pittsburgh, Penna. Branch Offices: New York City, Philadelphia, Columbia, Chicago, Kansas City, Tulsa, Houston, Los Angeles and Oakland

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

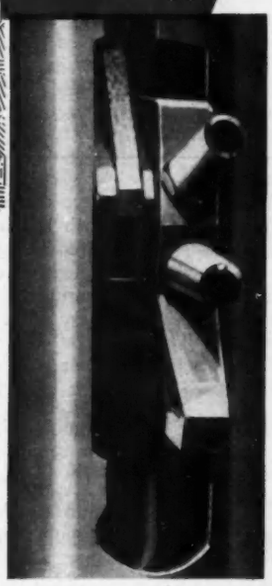
Now YOU CAN SECURE CORES FROM THE SIDE WALLS OF A HOLE!



In holes from 4¾" to 12¼" core sizes range from 7/17" to 11/16" in diameter and from 1¼" to 2½" in length. Cores are usually secured in all four tubes and all easily removed for examination.



An unretouched photograph. Cores were easily taken and easily removed.



The Baker Well Sampler has been field tested in various fields.

IT is now simple, safe and economical to take actual cores from the side-wall formation, at any depth in a previously drilled hole, with the Baker Wall Sampler.

You are enabled with this new tool to secure positive information regarding all characteristics of formations from which cores were not previously obtained. You can positively check the findings of other correlating methods or devices.

The BAKER *Hydraulic* WALL SAMPLER

The strong, safe body is identical in every part with the well known Baker Rotary Hydraulic Expansion Wall Scraper. But instead of the Wall Scraper Blades the Baker Wall Sampler Blades are used, each blade being provided with two core-taking tubes, thus making it possible to secure four cores at one operation, at any point in the hole.

CONSTRUCTION AND OPERATION

The design of the chrome-molybdenum Wall Sampler Blades and the tungsten-chrome-vanadium Core-Taking Tubes is shown by the illustrations.

After the Baker Wall Sampler is lowered on drill pipe to the desired depth, pump pressure is applied to the enclosed piston which is forced downward, thus expanding the blades against the formation. The string is then lowered slightly which causes the tubes to cut cores from the side-walls. When the string is raised, the blades (with cores intact) drop safely within the Wall Sampler body, and the assembly is removed from the hole.

Just about as simple as it sounds, the Baker Wall Sampler makes it possible for you to know the exact nature of the formation at any depth.

Here's good news for every owner of a Baker Wall Scraper! You need only a set of Wall Sampler Blades to take advantage of this amazing new method of side-wall coring!

MAIL THIS NOW

GET ALL DETAILS FREE!

Tell me more!

☐ Have your representative call.

☐ Send me illustrated Bulletin.

Name_____

Position_____

Company_____

Street or Box No._____

City_____ State_____

BAKER OIL TOOLS, INC.

POST OFFICE BOX 609, HUNTINGTON PARK, CALIFORNIA

COALINGA • TAFT • HOUSTON
OKLAHOMA CITY • TULSA • NEW YORK

A NEW "Cleveland" PRODUCT *enters a new field*

The Cleveland Hardware & Forging Company has taken another step forward. To the proved performance of its remarkable line of forgings, made since 1881, it has added the "Cleveland" Thread Protector, already acclaimed by leaders in the Pipe Industry as *the perfect Protector*. This new "Cleveland" product possesses exclusive features and advantages that insure the greatest ease in handling and the highest degree of service.

Skilfully and scientifically designed, it is a great improvement over all other Protectors now on the market, yet the cost is no more. SAMPLE ON REQUEST.

"Cleveland" THREAD PROTECTOR

CLEVELAND FIELD END PROTECTOR
Patented

COUPLING END PROTECTOR
Patents Pending

The "Cleveland" Field End Protector cannot be "spun" on or off like the ordinary Protector that yields to the slightest turn. It is a steel shell provided with a coil spring FLOATING THREAD which is constantly in compression. The "Cleveland" Protector may be twisted off almost to the end of the pipe, but cannot be "spun" off. This feature insures *"service to the end."* The coil thread is cadmium plated to avoid rusting or "freezing" to the pipe.

The "Cleveland" Field End Protector is PERFORATED for drainage—an important feature where shipments of pipe remain out of doors for a long period. Manufacturers have praised this point highly.

The coil thread or spring is FLEXIBLE to a high degree, making it unnecessary to carry a variety of sizes in stock in order to meet every pitch diameter of thread. The coil will readily conform to various threads. This great flexibility is an advantage when applying the "Cleveland" Field End Protector, as it is *impossible to strip or scar the pipe* when attaching.

An important feature of the "Cleveland" Nipple End Protector is the fact that the width of the flange is of less dimension than the wall thickness of the coupling. Since all couplings have a radius at the end, ordinary Protectors extend over the O.D. of the coupling—often beyond, encouraging "side slapping" and loosening of the Protector in transit, because of sudden starting and stopping of the train . . . The "groove" between the Protector and the coupling of ordinary make causes adjoining Protectors and couplings to "lock." *"Cleveland" Protectors entirely eliminate these damaging results.*

Loosening and tightening is greatly facilitated in the "Cleveland" Nipple End Protector because of lugs (cast on the inside) and slots in the flange.

To insure protection to the end of the threaded portion before shipment and before application, an EXTENSION has been provided. This exclusive feature also serves to assist in easily starting the "Cleveland" Nipple End Protector into the coupling.

The "Cleveland" Nipple End Protector is exceptionally durable. It is a zinc die casting, possessing a tensile strength of 45,000 lbs. to the square inch.

The
CLEVELAND HARDWARE & FORGING CO.
3274 E. 79th St. **Cleveland, Ohio**

JAN 30 1935

©C1B 250549

THE OIL WEEKLY

ENGINEERING « STATISTICS » THE WEEK'S NEWS

EDITORIAL STAFF

WARREN L. BAKER
Editor

J. KENT RIDLEY
Managing Editor

ASSOCIATE EDITORS

JACK LOGAN BRAD MILLS
WM. V. GROSS

DISTRICT EDITORS

B. F. LINZ.....Washington
FLOYD SWINDELL.....Tulsa
H. H. KING.....Fort Worth
W. E. GREEN.....Los Angeles
EARL S. POST.....San Antonio
R. W. BYRAM.....Austin
CHAS. LEYENDECKER.....Houston

PUBLISHED BY
THE GULF PUBLISHING COMPANY
HOUSTON, TEXAS

Copyright, 1935

R. L. DUDLEY, *President*
A. L. BURNS, *General Manager*
S. W. ROBINSON, *Editorial Director*

ADVERTISING STAFF

DICK SWINSKY.....New York
W. W. PIGUE.....Pittsburgh
T. W. NELSON.....Chicago
J. F. CARTER, JR.....Tulsa
W. E. GREEN.....Los Angeles
CHAS. WYATT.....Houston
WM. ATCHESON.....Houston

W. J. HUDSPETH
Circulation Manager

Contents « January 28, 1935

Volume 76 ◆ Number 7

THE CHANGING PANORAMA..... 7

NEWS OF THE WEEK:

New Law Looms as Hot Oil Rises..... 9
By Jack Logan
No Opposition to Control Bill 11
Justice Department Criticism Answered 12
Valuable Elks Hill Property Ruled Government Land 12
Bill Would Double Importation Tax 14
Bills Would Stop Panhandle Gas Waste 14

Production 101
Crude Prices 103
Personals 16
"Squeaks" 135

ANNUAL STATISTICAL REVIEW:

Favorable Statistical Position Attained in 1934..... 19
By Jack Logan
Annual Field Review and Forecast..... 25

Kansas 25
California 32
Mid-Continent, Texas..... 35
Michigan 38
Louisiana 44
Mississippi 45
Gulf Coast 34
Oklahoma 36
New Mexico 36
Rocky Mountains 40
Arkansas 44
Southeastern States 45
South Texas 28

World's Production Since 1857, by Countries, by Years..... 47
U. S. Production Since 1859, by States, by Years..... 48
United States Crude Oil Production by States and Districts..... 49
1934 Field Statistics by States and Districts..... 77
Pipe Line Construction Activity Should Be Greater..... 95

FOREIGN DEVELOPMENT:

Roumania Expects Greater Production..... 97
F. W. Penny

MARKETS AND STATISTICS:

Markets Weaker as Hot Oil Up 99
Production Further Above Allowable 101

FIELD REPORTS:

Oklahoma 106
California 124
Kansas 108
Texas 109
Louisiana 120
Michigan 126
Mountain 122
Wildcats 128

SPECIALIZED OIL JOURNALS
Published by
THE GULF PUBLISHING COMPANY

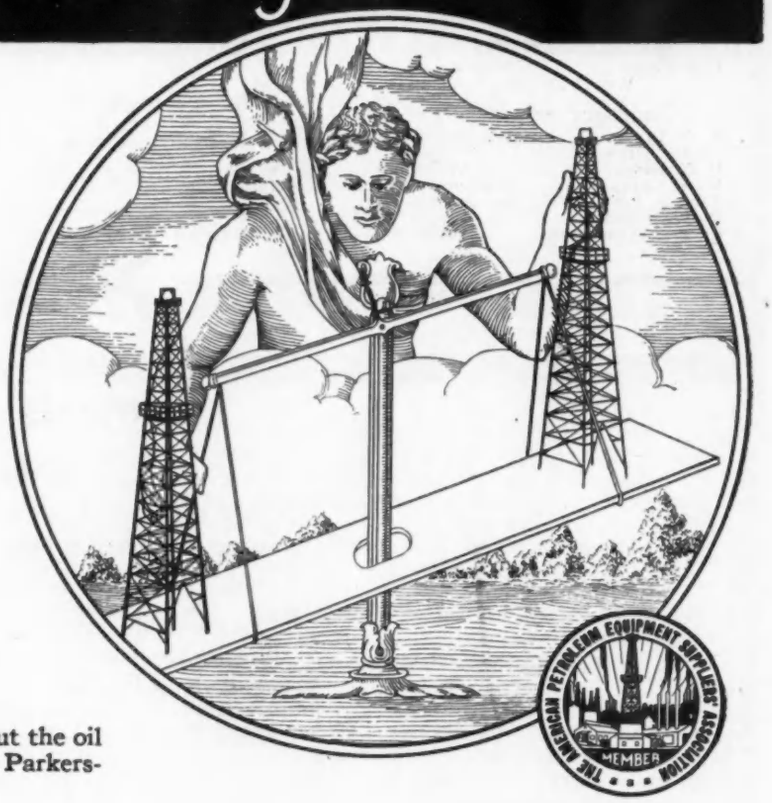
BRANCH OFFICES

NEW YORK.....250 Park Ave.
PITTSBURGH.....Standard Life Bldg.
CHICAGO.....141 W. Jackson Blvd.
LOS ANGELES.....Haas Building
TULSA.....Hunt Bldg.
FORT WORTH.....W. T. Waggoner Bldg.
WASHINGTON.....Albee Bldg.

Member Audit Bureau of Circulations.

Published every Monday. Single Copies 15 cents. Subscription price: domestic and foreign, $1.00 a year. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879. Subscripption restricted to those engaged in the producing and pipe line branches of the oil industry or the manufacturing and distribution of oil field supplies.
Advertising rates on application.

When SAFETY is in the balance, do not compromise with weight!

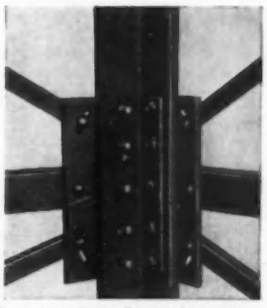


CUTTING corners by lowering the quality of a product to meet a price, has never been a Parkersburg policy. Especially where derricks are concerned, weight has never been sacrificed—with consequent loss of rigidity and safety—in order to win a customer.

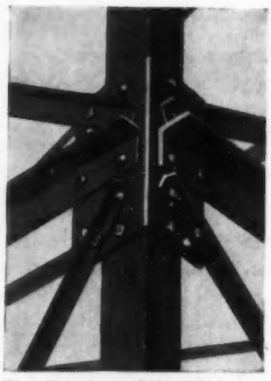
The misrepresentation of a derrick's working load capacity is negligence in its worst form; it is a menace to lives and property and as such will not be countenanced by Parkersburg.

Parkersburg Derricks are made up of steel members of flawless quality, accurately designed to give full strength and rigidity, and are faultlessly fabricated. Only when the *design*, the *steel*, and the *workmanship* are *100% in quality* will the strength, stability and safety of the derrick be assured.

Field records for over 37 years throughout the oil fields of the world attest the worth of this Parkersburg policy.



Interior view of leg joint assembly . . . Note how extra long splice bars reinforce the joint.



Exterior view of leg joint . . . Note large angle splice plate, and slots in girt, brace and leg connections.

BY a simple, basic design Parkersburg secures perfect load distribution without resorting to surplus bracing. This is accomplished by means of butt-to-butt contact of the leg sections, over-size splice plates and patented slot-bolts. Double bolt construction is used in girts and braces on all heavy drilling derricks.

Parkersburg Derricks are as strong as their angle joints . . . and they can be counted upon to carry well over their A.P.I. rated capacities.

Well-organized field forces and near-by stocks of derrick repair parts are further reasons for specifying "Parkersburg."

SERVICE

● A complete Service Organization is maintained at each District office; practical production engineers are always ready to assist producers --- large or small --- in the solution of their problems

THE PARKERSBURG RIG AND REEL CO.

PARKERSBURG, W. VA.

NEW YORK · · TULSA · · DALLAS · · HOUSTON

VOLUME 76, No. 7 JANUARY 28, 1935

THE OIL WEEKLY

FOR OIL AND GAS PRODUCTION AND
PIPE LINE DIVISIONS

ENGINEERING • NEWS • STATISTICS

The Changing Panorama

Annual Statistics

THE year 1934 truly was an outstanding one. A favorable statistical position was attained and the industry enters 1935 with better statistical and economical prospects than it has known in many years.

During 1934, the upward trend of consumption continued and total demand for United States petroleum reached its highest level since 1930. There was close balancing of supply against demand and prices remained constant at a profitable level. Substantial reductions were made in stocks of both crude oil and refined products and now are at the lowest figure in seven years. Imports were slightly higher than in 1933 but did not reach levels of other years.

With every statistical division greatly improved, and apparently no unusually large field in the immediate offing, the outlook is bright.

Details of the statistical position are given in an article appearing on page 19.

Field Development Outlook

INDICATIONS are that field development work during 1935 will register a substantial gain over 1934, although the latter showed a gain of 5808 operations over 1933 to establish a four-year high. In this issue are published reviews and forecasts of various districts, or states. Outstanding is the outlook for increased operations in every region.

Increased consumption demand to a point near the all-time record together with strict proration has caused the industry to draw heavily upon its known crude supplies, and as a result the crude reserves of the nation must be replenished to assure ability to meet future demand. This factor, and the improved general economic outlook, are causes for anticipating greater field development activity in 1935, when total completions should exceed 20,000 and may reach 22,500. Page 25.

East Texas Courts

CREATION of additional courts in the East Texas district which is provided by a bill just passed by the Texas Legislature, will do much to relieve the congestion that has existed during the past few years in that area. This means much to the oil industry, as most of the cases have been within this industry, and many of them have been oil enforcement cases. Page 14.

The Oil Man's Calendar

FEBRUARY
18-21 *Petroleum Division, A. I. M. E. (A. I. M. E. Annual), New York.*

MARCH
21-23 *American Association of Petroleum Geologists, Wichita, Kansas.*

APRIL
8-13 *Oil Equipment and Engineering Exposition, Houston, Texas.*
11-13 *Petroleum Industry Electrical Association, Dallas, Texas.*
22 *American Chemical Society, New York.*

MAY
1-3 *Natural Gasoline Association, Tulsa, Oklahoma.*
8-11 *Oil and Gas Power Division, American Society of Mechanical Engineers, Tulsa, Oklahoma.*
14-16 *American Petroleum Institute, Mid-Year Meeting, Mayo Hotel, Tulsa.*

JUNE
20-21 *Pennsylvania Grade Crude Oil Association, State College, Pennsylvania.*

NOVEMBER
11-14 *American Petroleum Institute, Annual Meeting, Biltmore Hotel, Los Angeles.*

THIS WEEK

ELSEWHERE in this issue are presented statistics covering the more vital operations in the producing branch of the industry for 1934. The material is collected and presented in such manner as to make it easily accessible for those who will want to preserve and use annual statistics for 1934. Production figures show the world's and the United States' recovery since oil was first produced. Figures were compiled with painstaking care under the direction of Jack Logan, Associate Editor and Staff Statistician, who also summarizes the year's outstanding statistical developments in an article.

Also, there appears field development reviews and forecasts for 1935 from each major producing district or state in the United States.

Drilling Activity

FURTHER indications that there will be increased drilling in the United States this year are to be found in operators request to be given permission to drill 67 wells in the Polo field, Noble County, Oklahoma. The field was discovered in July, 1934, and to date only 11 wells have been completed, and five are drilling and there is one new location. Increases of this volume are being sought in many fields.

Michigan's Position

LIKE other oil producing areas, Michigan during the past year drew heavily upon its known crude reserves although it produced under rigid proration regulations. As a result this state may be added to the growing list of those in which potential production has declined. The state's potential as of January 1 was 139,062 barrels, of which 125,605 barrels is in the Porter pool. It is estimated the potential soon will fall to 75,000 barrels because of the lack of new discoveries.

Meanwhile, the state established a new all-time peak output during 1934 when it produced 10,589,600 barrels. Now, the state has been granted a higher federal allocation, 30,000 barrels daily effective February 1, which together with the decreasing potential, requires that state authorities revise proration regulations. It is probable that not more than 50 percent of the 289 wells on production in the Porter field will come under proration restrictions during February if the exemption figure is boosted to 100 barrels as now being considered by the State Proration Committee.

Michigan operators are confronted with the necessity of finding new discoveries during 1935 if it is to maintain its standing in the United States crude markets.
Page 127.

Panhandle Gas Waste

SEVERAL bills have been introduced into the Texas Legislature that propose means for curing the wasteage of natural gas in the Texas Panhandle, a subject that has become quite important. One bill would require ratable taking of gas by those engaged in the transportation of gas and would establish a fair rate for gas purchased. Another bill would prohibit any concern from engaging in both production and transportation of gas. A third bill is similar to the ratable taking bill. A bill of the latter nature was declared unconstitutional by federal courts two years ago.

Oil Bill Passed

THE Connally Oil Bill, which provides for reestablishment of the federal tender board in East Texas so as to control interstate shipments of hot oil was passed by the Senate last week. Little debate took place, and it is anticipated that the bill also will easily pass the House of Representatives. The bill practically reestablishes Section 9 (c) which was ruled invalid by the United States Supreme Court.
Page 11.

NEXT WEEK

THE next issue of The OIL WEEKLY, February 4, will carry Part II of the series of articles entitled "Kansas' Future Crude Oil Reserves Status". This installment is particularly interesting since Robert H. Dott, the author, attempts to show the proportion of the state's demand that will be supplied by present field, and the amount that must come from field yet undiscovered.

The Hobbs, New Mexico, field has an interesting history and is being operated at an efficient rate by voluntary agreement. Remarkable success has been attained in setting gas and water packers between two producing zones of the main formation. Perfect water shut offs have been obtained and gas-oil ratios reduced. Brad Mills, Associate Editor, who has just completed a tour of all active Permian Basin fields, is the author.

New Law Looms As Hot Oil Rises

Congress rushes new oil control legislation, as output of illegal oil gradually increases in East Texas. Bill approved by Senate would restore effective regulation

JACK LOGAN
Associate Editor

FOLLOWING about two weeks of suspense that arose in the wake of the Supreme Court decision in the Panama and Amazon oil control cases, there has finally developed some action to relieve the tension.

On the one hand, hot oil producing and refining in East Texas has been increasing, finally justifying to a limited extent the fearful excitement exhibited by some on announcement of the important decision.

On the other hand, noteworthy progress has been made in Congress toward reinstating the shipping control phase of federal regulation that was knocked out by the decision of the high court. Such reinstatement, if effected, will put the oil control situation back in the successful status that existed prior to the decision.

Hot Oil Output Higher

THE volume of hot oil that was being produced and refined in East Texas was indicated in the latter part of the past week to have risen to possibly 30,000 barrels daily, some estimates being higher and some lower. The number of plants operating in the district had increased to about 25, a substantial proportion of which were presumably using illegally produced crude in their runs.

A week earlier, the hot oil volume had been averaging around 20,000 barrels daily, it was estimated, and about a dozen refineries were operating. Two weeks earlier, and for several weeks prior to announcement of the Panama-Amazon decision, hot oil was being held in East Texas to about 10,000 barrels daily or less, and fewer than a dozen refineries were in operation, a considerable proportion using only legally produced crude.

Untendered Gasoline Released

In addition to the rising new supply of hot oils, there has occurred lately another complication in East Texas control that has tended to make the Mid-Continent refined oil markets unsteady. It was the release, through state district court action, of perhaps 2,500,000 barrels of untendered gasoline and other refined or partially refined products into commerce. The predominant proportion of the material was in storage on the Houston Ship Channel, with only about a fifth of the total still in East Texas. Only a relatively small proportion of that untendered material represented, however, a threat to market stability, as markets had already been lined up for much of it, some being destined to go to France, and important quantities to destinations on the Atlantic seaboard.

THIS material was permitted to move into commerce on the owners' contentions that it was manufactured prior to December 10, when the Texas Railroad Commission put into effect its current requirements that all oil shipments be supported by tenders approved by the commission. So that the ruling would not open an easy way for thwarting the commission's regulatory program, the court issued a supplemental order and announced a future policy. It made provision whereby commission agents could inspect the products involved and require that only those exact products be shipped.

The court, sitting at Austin, granted temporary injunctions, restraining the railroad commission from requiring the prescribed tenders on the material involved. In accordance with the decision, federal district court restraining orders now in effect against the railroads, preventing them from moving untendered oils, were amended to permit these particular oils to be shipped. The Texas oil control authorities gave notice of appeal in the matter, but the material will presumably go to market despite the appeal.

Control of Rail Shipments

THE federal court restraining orders that are in effect against the railroads prevent them from moving untendered oils interstate as well as intra-state. Thus so far as the railroads are concerned, there is still practical elimination of hot oil shipping, as before the Supreme Court decision. Prior to the decision, state authorities regulated only intra-state shipping, while the federal tender board restricted interstate movement. In anticipation of the decision, the state authorities secured the injunctive help.

The only danger of any increase in hot oil shipping by rail is that involved in the possibility the state tender board alone may not be able to give as effective or thorough results as the state and federal boards, collaborating, could give. There is, of course, the additional possibility that the restraining orders against the railroads may be lifted upon further court hearing in the matter. But at the same time there is a chance that further court action may be postponed until Congress

has had time to restore federal shipping control through a new law.

Truck Movements of Hot Oil

WHILE shipment of hot oil by rail has been circumscribed by the railroad commission's program and the restraining orders, an important leak for hot oil from East Texas has existed in tank truck movements. It is obvious that considerable hot East Texas gasoline has been going to market within the state by trucks, as evidenced by persisting depressed service station postings in certain areas, including Dallas and Fort Worth. Yet retail prices have been holding firm in other areas within trucking distance of East Texas, as at Houston. It appears, consequently, that by no means all of the hot gasoline that is currently being made in East Texas is being marketed; that substantial proportions must be going to storage.

In efforts of the state to curb truck movements, the Texas Highway Patrol recently augmented its East Texas force by a score of men. The patrol is cooperating with the railroad commission. It is understood also that the motor bus division of the railroad commission will take a part in the campaign against hauling of hot gasoline and oil. The division controls licensing of trucks operating commercially in Texas, and such licenses can be revoked for various reasons.

Gasoline Prices Lower

GASOLINE prices at Mid-Continent refineries last week were lower than in the previous week. The weakness of the market was attributed primarily to the release of the untendered Texas material into commerce through the above discussed court action. The gradually rising volume of hot oil in East Texas was also a disturbing factor.

Hot gasoline continued to move from East Texas refineries by trucks at around two cents a gallon. Meanwhile, East Texas gasoline eligible for tenders and rail movement was down a quarter-cent from a week previously, with third grade averaging 3⅜ cents a gallon, middle grade 3⅞ cents, and premium grade 4⅜ cents. North Texas and Group 3, Oklahoma, prices in the meantime were averaging 3½, 4⅛, and 4⅝ cents.

Congress Acts on Oil Bill

WHILE Texas authorities were coping with fair success against hot oil runners, there was in prospect early help for the state from the federal government. The United States Senate January 22 summarily passed, by voice vote, the Connally bill, designed to reenact in valid form the NIRA Sub-Section 9 (c), that was invalidated by the Supreme Court in the Panama and Amazon cases.

The measure would reinstate federal regulation of interstate oil shipping, putting such regulation, however, on a permanent rather than limited time basis. The legislation would put the oil control situation almost exactly back where it was before announcement of the Panama-Amazon decision, when control was about air-tight and and when practically everybody was happy (except Oil Administrator Ickes, who still has czar-of-oil aspirations.)

Following the ready approval of the Connally bill by the Senate, it appeared that the House of Representatives would also take quick action on the measure. The interstate and foreign commerce committee of the House indicated it would consider the bill either before the end of the week or in the following week.

AT least one senator expressed doubt the Connally bill remedied defects the Supreme Court found in Section 9 (c), because the new measure similarly prescribed penalties for violations of orders issued by the President. Nevertheless, sponsors of the bill regarded it as air-tight. They maintained that the Connally bill does get around the Supreme Court objections; that it complies with the court's contention Congress must set forth a policy before it can delegate to the President authority to enforce orders he or his agents may promulgate.

Supporting the opinion the new law would be valid is the implication it has the sanction of the Attorney General, since it embodies amendments recommended by that official. Under the amendments the President or the agent or agency set up by him would prescribe rules and regulations, as under Section 9 (c); but the authority to apply to a federal district court for enforcement of the act could be delegated by the President to the Attorney General, instead of to such agent or agency, as under Section 9 (c), whereby Oil Administrator-Secretary of the Interior Ickes and his boards represented the agent and agency.

Even if the Connally bill, on enactment, would fail ultimately to meet the Supreme Court's approval, it could reach that court only through lengthy litigation and appeals; and if upheld by the lower courts, it would in the meantime be providing the control that is sought.

In the Legislative Halls

SOME additional headway was made last week on the interstate oil control compact idea. The lower house of the Oklahoma legislature gave preliminary approval of Governor Marland's bill authorizing the state to participate in such agreements.

The Texas legislature is considering various proposals affecting oil and gas. There are bills: to reduce gas waste in the Panhandle, to declare gas pipe lines public utilities, to divorce gas transporting companies from producing corporations, to revise methods of collecting the gross production tax on crude oil, to tax chain stores (filling stations included), to set up special courts in East Texas for improving oil control.

No Opposition to Control Bill

Prompt Action in House Expected After Connally Measure Passes Senate

B. F. LINZ
Staff Correspondent

WASHINGTON, D. C., JAN. 25.

IN the face of a warning by Senator Borah of Idaho that he saw in the measure grave defects which might well lead to its annulment as unconstitutional by the United States Supreme Court, the Senate on January 21, without a record vote, passed the Connally Oil Bill.

Discussion of the measure on the floor of the Senate, almost entirely confined to the question of its constitutionality, revealed that the oil administration accepts it as merely a temporary expedient and will not relinquish its drive for full federal control.

The question of constitutionality, raised by Senator Borah and others, was met by Senator Connally of Texas with the contention that the bill did not propose to prohibit, but merely to regulate interstate commerce.

Nevertheless, it was contended by Senator Borah, the measure presumes to give to the President the right to prescribe rules and regulations, violation of which would be a crime, thus transcending the power of Congress under the constitution to delegate authority to the chief executive.

The debate on constitutionality was participated in by a number of senators, among them Senator Glass of Virginia, who seldom enters debates on general subjects. Expressing the belief that the bill would encounter new opposition from the courts, the Virginia Senator said: "On questions of law I do not presume to speak, but on questions of common sense and the text of the constitution I do presume to speak," indicated his belief that the measure did not meet the objections raised by the Supreme Court in its opinion in the Panama and Amazon cases.

The only outspoken opposition to the measure itself was voiced by Senator King of Utah, who asserted he not only believed the bill unconstitutional but that it reflected a growing tendency to lodge in the central government "bureaucratic control over our whole social and economical life."

Comparing the transportation of contraband oil with that of stolen automobiles, Senator Connally declared that his bill merely applied to oil the Dyer Act, making it an offense to transport a stolen automobile in interstate commerce.

"Oil is a fugitive element," he pointed out. "It is not stable. The surface owners of oil property must capture the oil in order to secure the benefit of the oil which is supposed to be under their land. There is what is called a law of capture. If the owner does not capture that oil, someone else adjoining or in another portion of the same field may capture it, and when he does, it becomes his oil."

"So the state, in order to protect surface owners in their rights, has found it necessary to set up an elaborate system of drilling regulations, and they prescribe upon what size tract of land a well may be drilled, and they provide that the adjoining owner has to observe certain rules and regulations in his drilling to protect the oil under the adjoining owner's land. Where an offset well is drilled, where a well is drilled on adjoining property, the leaseholder must also drill or forfeit his lease in order to protect the owner of the soil.

"One of the chief evils we are seeking to correct is the absolute theft of oil," he explained. "Theft of oil just like the theft of automobiles, theft of oil just like the theft of a horse or of a cow. On account of the flush production in many of the great fields the oil which is being illegally produced is oil to which the man who produces it is not justly entitled. If he should observe his own proration, his own limitation, and thereby respect the rights of the adjoining owner, we should not have such a bill before us. But one lawless owner or driller, disregarding the state law, by devices, through underground passageways, through the employment of by-passes that dodge the point where the oil is measured, and all sorts of artifices, illegally produces not only his own oil but the adjoining owner's oil, and it is to prevent that sort of theft and that sort of misappropriation, in order to make effective the state laws in that regard, that we are asking the federal government to say that when the state does administer its oil law, when it does set up a system of protecting the owners of oil property, that the contraband oil, that illegal oil, that the oil which has been misappropriated in violation of the law, stolen, if you care to use that term, from the adjoining owner, shall not be permitted free shipment in interstate and foreign commerce; that the federal government shall not afford the law-breaker an avenue of escape from punishment, since the state cannot prevent interstate shipments, without federal prohibition or regulation of such shipments, the federal government permits the nullification of state law.

"My contention is that Congress is not prohibiting the interstate shipment of oil under my bill, but only the movement of that oil that is illegally produced according to state law."

The senator made it clear that the oil administration, while not opposed to his bill, favors more comprehensive regulation, and quoted from a letter written him by Charles Fahy, chairman of the Petroleum Administrative Board, in which it was declared that "it is my opinion that this bill would prove an effective measure in supplementing state conservation laws, but I

continue in my belief that it is advisable that the bill cover interstate shipments of petroleum illegally produced, refined, processed, and so forth, under federal as well as state laws.

"I should also like to restate my opinion," Fahy wrote, "that although the bill serves as a substitute for and a very great improvement over Section 9 (c), it is very desirable to adopt far more comprehensive legislation."

The bill, as passed by the Senate, was altered in but two particulars from the measure introduced by Senator Connally, a full text of which appeared in THE OIL WEEKLY last week. At the suggestion of Senator Robinson of Arkansas, amendments were adopted which would place in the hands of the attorney general, rather than in the President's "Duly designated agent or agency" the conduct of prosecutions, the purpose being to center litigation in the Department of Justice.

The measure now goes to the House committee on interstate and foreign commerce of which Representative Rayburn of Texas is chairman, and will be referred to the sub-committee on oil headed by Congressman Cole of Maryland, who, as head of the special investigating sub-committee, last summer conducted a broad study of the situation.

It is not anticipated that any difficulty will be experienced in securing adoption of the measure in the House of Representatives, where the real fight over oil is expected to come with consideration of a bill now being prepared by Congressman Disney of Oklahoma, along the line of the federal control bill which he and Senator Thomas of that state sponsored last session.

Valuable Property at Elks Hill Ruled Government Land

Washington, D. C.—Oil operators in the long contested Section 36 of the Elks Hill field were this week faced with the possibility of being required to pay large sums to the government for oil and gas taken from the land under a decision of Secretary of the Internior Harold L. Ickes holding the land to be government property.

With an estimated potential value of between 25 and 30 million dollars, Section 36 came into the limelight a decade ago in connection with the Teapot Dome scandal, in which Secretary Ickes' decision forms a belated chapter.

The decision reverses an opinion rendered February 23, 1933, by C. C. Moore, then commissioner of the general land office upholding California's right to hold title under a school land grant made some 30 years ago. Not only does the secretary's decision hold that the 1933 transfer to the state was illegal and the land belongs to the federal government but also that the government must be reimbursed for the 3,500,000 barrels of oil and some 57 billion cubic feet of gas which have been taken out, the value of which is estimated at nearly $6,000,000.

The holders of the land, under which it is estimated there are some 22 million barrels of recovarable oil, are Standard Oil Company of California, Mrs. Sydney H. Greeley, Frank J. Carman, Charles O. Fairbank, Edward L. Doheny, Thomas A. O'Donnell, Pan-American Petroleum Company, Valley Natural Gas Company and Associated Gas Company.

Ownership of the land has hinged upon a determination whether its mineral character was known when the grant was made to the state. In his opinion, former Commissioner Moore held it was not; Secretary Ickes holds that it was. The commissioner's opinion was repugnant to the secretary and Mr. Moore resigned, at the request of his superior.

The first attempt to settle the ownership of Section 36 was made early in the Harding administration by the then Secretary of the Interior, Albert B. Fall. After an inquiry, Fall ruled that the land belonged to the state. The question was brought up during the Senate investigation of Teapot Dome, when it was contended that California never held title to the land on the ground that the government controlled all land containing known valuable mineral resources.

The matter was pressed by the late Senator Walsh of Montana, and in 1925 Standard Oil Company sought an injunction against reopening of the inquiry. The District of Columbia courts sustained the company but the United States Supreme Court reversed their decision, holding that Secretary Fall had not considered all the facts.

Throughout the battle for ownership of the land it was contended that Elks Hill was rightly a naval reserve and that private interests had no right to take gas and oil. It was indicated by Secretary Ickes when he announced his decision, that the holders of the property may again carry the matter to the courts in an effort to retain possession.

Justice Department Criticisms Answered

Washington, D. C.—Criticisms leveled at the Department of Justice because of its apparent failure to prosecute violators of the oil code were met by Attorney General Homer Cummings January 24 with an announcement that 106 oil violation suits have been instituted by the department.

The attorney general's statement was inferentially critical of the oil administration as charging violations where it could not prove them, as the number of suits represented less than one fourth of the cases reported to the department.

A total of 547 cases have been sent to the Department of Justice by the oil administration, it was revealed. "We have submitted 465 of these to United States district attorneys in various sections of the country," the attorney general stated. "They have filed suits in 106 of the cases, have held that evidence in 17 is insufficient and are holding 65 other cases in suspense, pending production of evidence that the questioned transactions were in interstate commerce.

"Any cases that come over here from the administration are promptly considered and if there is merit in them suits are promptly brought," he declared.

Tax Liens Filed on Nine East Texas Plants

Tyler, Texas.—Nine crude topping plants operated in the East Texas field by independents have been plastered with tax liens aggregating $33,860.75 by the Intelligence Unit of the United States Internal Revenue Service for alleged failure to pay taxes on 3,386,075 gallons of gasoline during 1934.

Evasion of the one-cent per gallon Federal tax levy on gasoline carries penalties involving heavy fines and jail terms upon conviction, but only a few cases have been prosecuted in East Texas. Violations of this tax measure recently reached such proportions that a branch office of the General Counsel Division of the Internal Revenue Department was established at Dallas to cope with the tax evaders in East Texas.

RECOVERS ALL THE OIL!

The uncertainties of rule-of-thumb methods have established Tretolite definitely as the most economical, speedy and reliable process for treating crude oil to pipe line requirements.

Tretolite Advisory Service is maintained to help you get better results.

TRETOLITE COMPANY
MANUFACTURING CHEMISTS

Representatives in all principal fields

DALLAS **ST. LOUIS, MO.** **LOS ANGELES**

Create Additional East Texas Courts

Austin, Texas.—The Texas Legislature last week moved promptly to comply with requests of Governor James V. Allred.

Bills were finally passed in both House and Senate creating three additional district courts in East Texas, and extending the term of a third which would have been discontinued in August of this year.

Through provisions of these acts, the 124th court, Gregg County, will be continued, and a new court was provided for Gregg County, one for Smith County and one for Rusk County.

The governor had sent up messages asking that these courts be added to aid in the enforcement of the state conservation laws. He pointed out that dockets of existing courts were exceedingly crowded, and that as attorney general his principal difficulty had been in obtaining trials of the cases filed.

Bill Would Double Tax on Imported Oil

Washington, D. C.—Doubling of the present tax on imported crude oil and imposition of taxes on asphalt and fuel supplies for vessels are sought by Representative Morgan Sanders of Texas in a bill introduced in Congress January 25.

The measure would continue all the present excise taxes on imported petroleum and its products which, under the law as now written, will automatically expire next June.

While the present tax on crude has been of value both in producing revenue and in aiding to stabilize the petroleum industry, the Texas congressman holds that the present rate of 21 cents per barrel is inadequate to meet the differential of $1.03 per barrel found by the tariff commission to exist between the production costs of domestic and foreign producers. Accordingly his measure calls for a tax of 42 cents per barrel, which, he declared, "will be of great benefit to the domestic petroleum industry, while still leaving some margin for the importers."

A tax of $2.00 per ton on imported asphalt is proposed to enable American manufacturers to compete with the foreign product, while the bill would make ship's oil supplies subject to tax by eliminating the exemption in the present law, provided by amendment of the 1932 Revenue Act.

"This amendment slipped through both branches of Congress without its significance being fully realized by many who represent constituencies in the oil producing states," Sanders explained. "Since this foreign fuel oil takes the place of the domestic product and therefore is in direct competition with American fuel oil, there is no valid reason why it should be exempt from payment of duty since, even with the duty added, its delivered cost at our seaboard would be less than production cost of the American product."

Introduce Bill Requiring Ratable Taking of Gas

Austin, Texas—Representative Charles Tennyson of Wichita Falls has introduced a bill in the Texas Legislature providing that all persons engaged in transporting natural gas by pipe line, shall be classed as common carriers.

The act also would include those who transport gas for hire and have exercised the right of eminent domain, have a line along a railroad right-of-way, or buy any gas from others which is to be moved interstate or intra-state.

The Texas Railroad Commission is authorized to establish rates which will permit a return on the investment of no more than six percent. Prohibition of discrimination between producers is specified in the bill.

The measure has two purposes. It would force gas companies with transportation lines to take gas ratably from all wells in a field, even though their own production is sufficient for their needs. It also would operate to establish a fair rate for gas purchased.

Several other bills of this nature now are being prepared, and a vigorous effort to enact one of these measures is anticipated.

Bills Proposed to Stop Panhandle Gas Waste

Austin, Texas.—H. K. Stanfield of Amarillo last week introduced in the House two new bills by which he seeks to stop the waste of gas in the Texas Panhandle and at the same time assure an adequate share in the market for independent producers.

One bill would prohibit any concern from engaging in both production and transportation of gas. Operators now engaged in both industries would be given one year in which to dispose of that portion of their property they concluded to sell.

The second bill would declare natural gas pipe line companies to be public utilities, and place them under the control of the Texas Railroad Commission. This measure is designed to supplant the "sour gas" law, which permits stripping of gas and burning of the residue for carbon black. A provision is included to re-enact the sour gas law at any time the new bill would be held unconstitutional by the courts.

Under this measure the railroad commission would be empowered to make a survey of the existing markets for gas to be used as light and fuel, and determine whether the supply is sufficient. Gas from the field would be restricted to use for light and fuel unless the supply is in excess of the demand.

After the survey is completed, the commission would allocate the production between the wells in each field, based on acreage and potential. The orders issued would contain a provision establishing a price to be paid for the gas at the well.

Orders of the commission would also fix the allocation of connections to the pipe line companies transporting the gas to the market, with proper arrangements for the interchange of facilities whenever it is deemed advisable, and the pipe line company must purchase from the wells so allocated to it.

A similar law, known as the "ratable taking law" was enacted two years ago, but was held unconstitutional by the federal courts. In an opinion handed down the court decreed that since the pipe line companies had gone to great expense in obtaining a market for their production and providing transportation facilities, they could not be forced to share this advantage with others less able to operate in this manner.

Court Permits Movement Of Oil Without Tenders

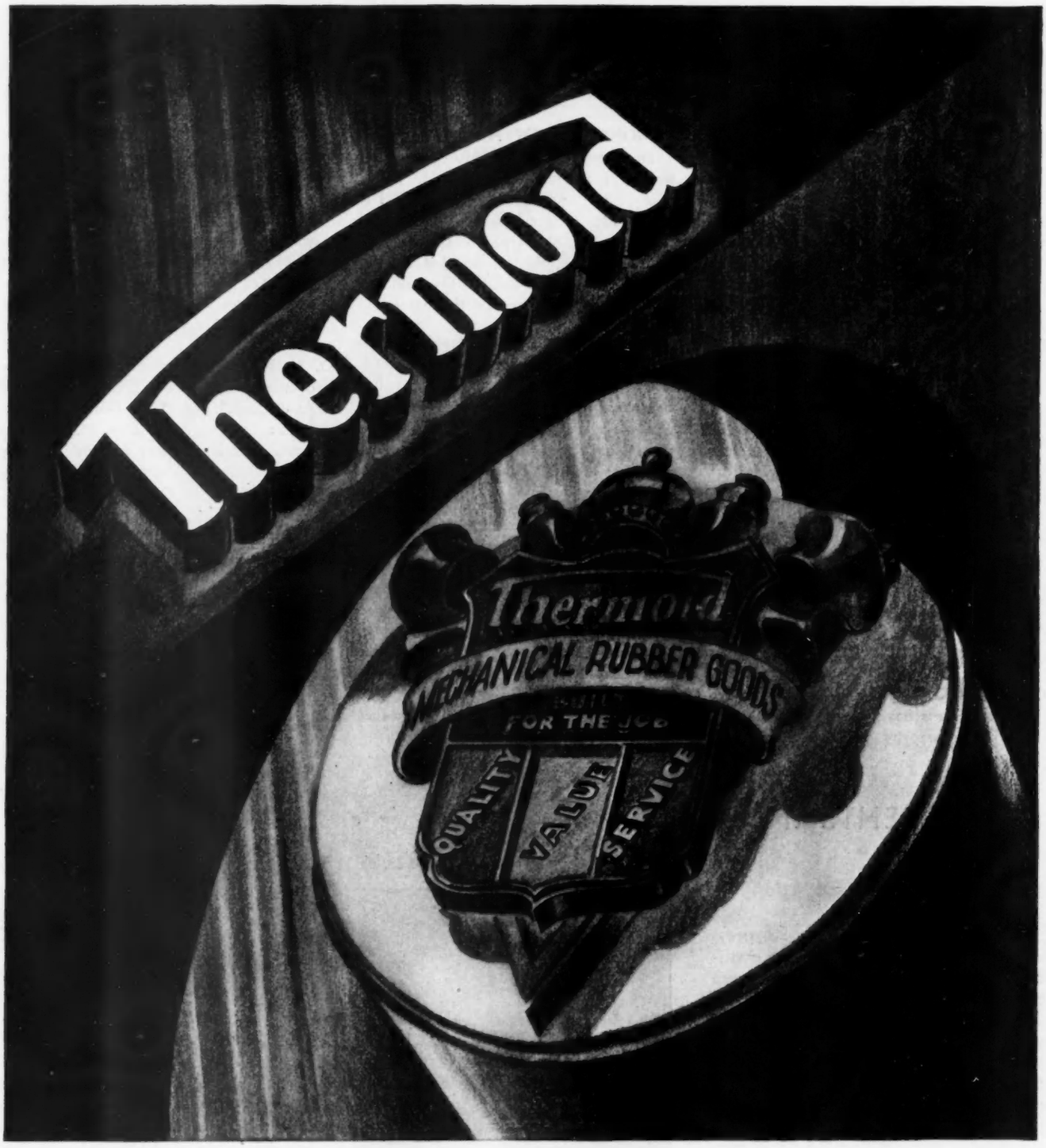
Austin, Texas.—Five East Texas operators last week obtained injunctions that will permit them to move 436,000 barrels of residium oil without Railroad Commission tenders.

Petitions filed stated that the plaintiffs had not sought tenders from the Railroad Commission because they were advised that the commission had announced that tenders for movements of the oil would not be approved.

The injunctions were granted by Judge J. D. Moore in the 98th District Court. The suits were filed by Binz Settegast, Houston attorney.

Each plaintiff listed in his petition an inventory showing the exact location of the oil in the field. They contended that the commission's processed oil tender order is invalid.

Russell W. Weaver was allowed to move 6,000 barrels; A. L. Weiss was permitted to move 245,000 barrels under one order and 75,000 barrels under another; R. Lacy obtained an order to move 55,000 barrels; Julian Potter also was permitted to move 55,000 barrels.



THE Thermoid crest is the emblem of achievement, the mark of quality, the sign of service. Call it what you will, the identifying mark of Thermoid on mechanical rubber goods is *a symbol of satisfaction.* Insist on that quality mark.

OIL WELL SUPPLY CO.

DISTRIBUTORS OF

THERMOID BELTING ☆ HOSE ☆ PACKINGS

MEN IN THE INDUSTRY'S NEWS

S. L. McDOWELL, general superintendent of production for American-Liberty Oil Company, has transferred headquarters in the East Texas field from Turnertown to a new field camp and office site near Kilgore. The company plans to start work shortly on 30 new tests on its Sabine River bed leases, where 72 oil producers have been completed.

GEORGE R. PINKLEY, geologist, associated with Standard Oil Company of Venezuela, at Caripito, Venezuela, for about a year, has returned to the United States and has resumed his work as a consulting geologist in South Texas, specializing in the Live Oak-McMullen County district. He was directly interested in drilling several wells in this area prior to his South American appointment.

LEWIS TITUS, president of Conservative Oil Company, of Washington, D. C., is scheduled to visit the San Antonio offices within the next several days.

C. M. HOCKER, A. C. Jones and Lorene Jones Spoonts have formed Mestena Oil and Gas Company of San Antonio.

RAYMOND E. HEITHECKER of the United States Bureau of Mines, now stationed at Bartlesville, Oklahoma, was a visitor in Shreveport, Louisiana, last week. Mr. Heithecker spent more than two years in Shreveport obtaining data for a bulletin which he issued on the Zwolle, Louisiana, field. The bulletin was recently published by the bureau.

WILLIAM F. MORGAN, independent operator of Houston, has moved his headquarters to Beeville. Mr. Morgan has been unusually active in South Texas for a number of years, being prominent in the establishment of several new producing areas in the general area.

C. F. SLOAN, Oklahoma City, was reelected president of the Oklahoma Petroleum Marketer's Association in its annual meeting at Oklahoma City on Saturday, January 19. L. E. Kincannon, Duncan, was reelected secretary-treasurer and Mrs. Vinnie Chaney, Oklahoma City, was elected acting secretary. Three new directors, A. J. Haney, Shawnee; E. E. Stubberman, Norman, and Kincannon were elected. Charles Bridges was retained as field representative.

REPRESENTS INDUSTRY
On Nation-Wide Broadcast

Charles L. Suhr, of Oil City, Pa., president of the National Petroleum Association, was the speaker on the Forum of Liberty broadcast Thursday night, January 24. Mr. Suhr was invited to speak for the petroleum industry, continuing the series of talks by leaders of various industries, who have been invited to give their views on the importance of their special fields, respectively, in a national industrial program. Mr. Suhr is known to oil men as the "dean of refiners" in the Pennsylvania region. His experience in the refining business goes back more than 40 years, and he has seen the petroleum industry go through several financial crises in addition to the present readjustment. In addition to his office as president of the National Petroleum Association, in which he is serving his second term, Mr. Suhr is president of The Pennzoil Company in Oil City, one of the major refineries in the East, and a director of the Pennsylvania Grade Crude Oil Association and the American Petroleum Institute.

CHARLES L. SUHR

He also is a member of several committees of the Federal petroleum administration.

CLIFFORD P. HICKOK, production department of Darby Petroleum Corporation and secretary-treasurer of the Oklahoma Production Committee, and Miss Marian Lee Raines, both of Tulsa, were married on Saturday, January 19. Hickok attended DePauw University and was graduated from Harvard University. Miss Raines was a graduate of George Washington University.

O. F. BARTON, superintendent of production in the South Texas district for American-Liberty Oil Company, has shifted headquarters from Conroe to Bruni, as the company is conducting an active drilling program in the nearby Cole field.

L. E. SNYDER, clerk-stenographer in the exploration department of Shell Petroleum Corporation, left Tulsa on Monday, January 21 for New York from which point he sails on February 2, to become an employee of the Lago Petroleum Corporation at Maracaibo, Venezuela.

CHARLES W. FOWLER, geologist of San Antonio, has made several recent trips into Northern Mexico, where he is doing geological work in connection with several wildcat prospects.

GEORGE R. BOYLE, geologist, of Mission, will be the principal speaker at the regular monthly meeting of the San Antonio Geological Society Monday evening, February 4. He will discuss the Samfordyce field, Hidalgo County.

KENNETH L. STONE, chief of the accounting department of the Petroleum Administrative Board at Washington was a San Antonio visitor January 24. He met with a number of South Texas operators at the San Antonio Petroleum Club to discuss various phases of the oil business in the territory.

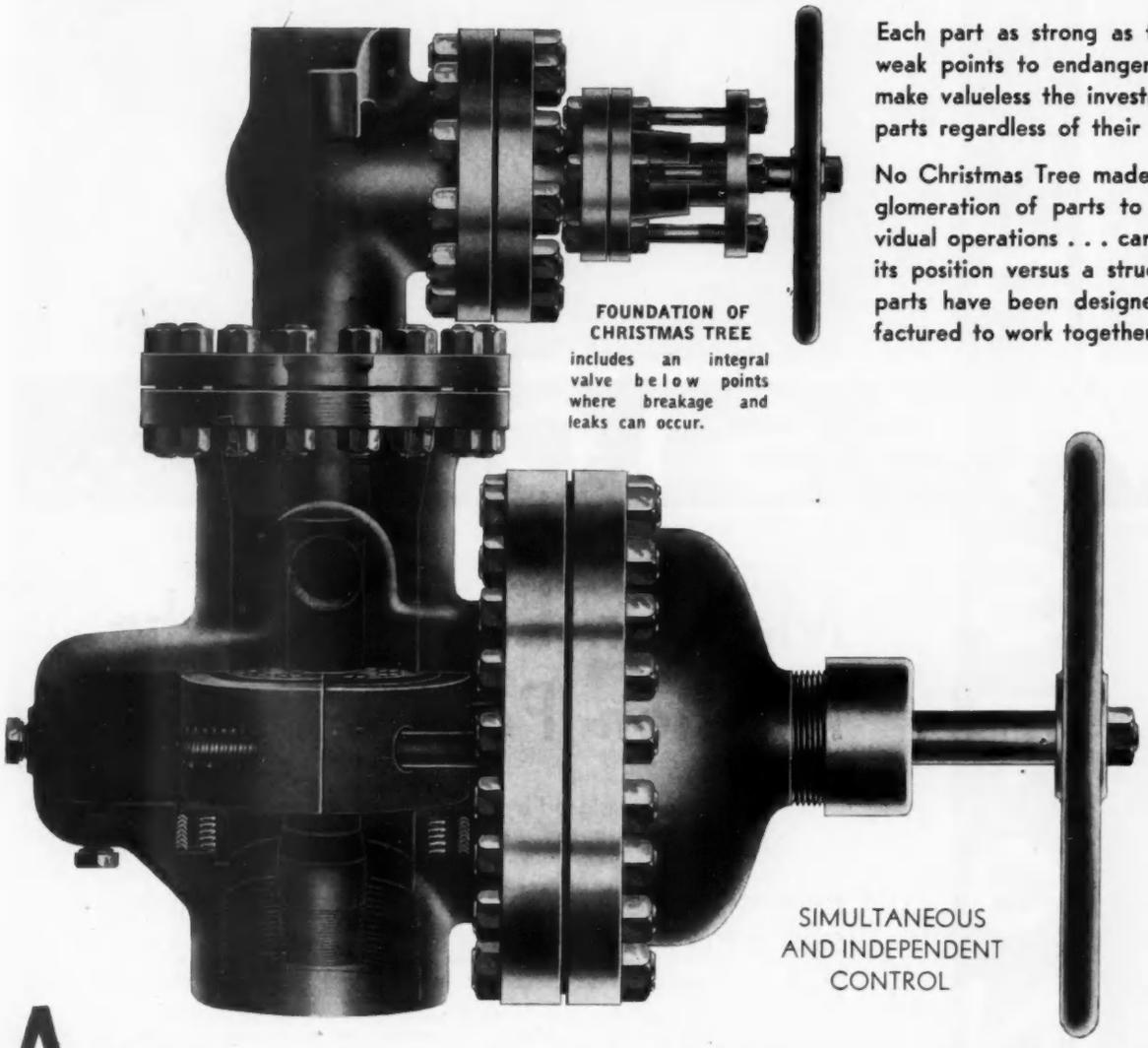
J. ED RAGAN, representative of Miller Sand Pump Company, who resides in Tulsa, Oklahoma, was a recent business visitor in Houston and other Gulf Coast oil centers.

S. P. BELL, from the Shreveport office of Arkansas Fuel Oil Company, has been transferred to the San Antonio district office of the same company. He fills a vacancy in the land and geological department. The company recently moved to larger quarters at 1446 Milam Building.

(Continued on Page 93)

YOU BENEFIT WITH

Balanced Construction



FOUNDATION OF CHRISTMAS TREE includes an integral valve below points where breakage and leaks can occur.

SIMULTANEOUS AND INDEPENDENT CONTROL

Each part as strong as the other. No weak points to endanger the well and make valueless the investment on other parts regardless of their quality.

No Christmas Tree made up of a conglomeration of parts to perform individual operations . . . can possibly hold its position versus a structure in which parts have been designed and manufactured to work together.

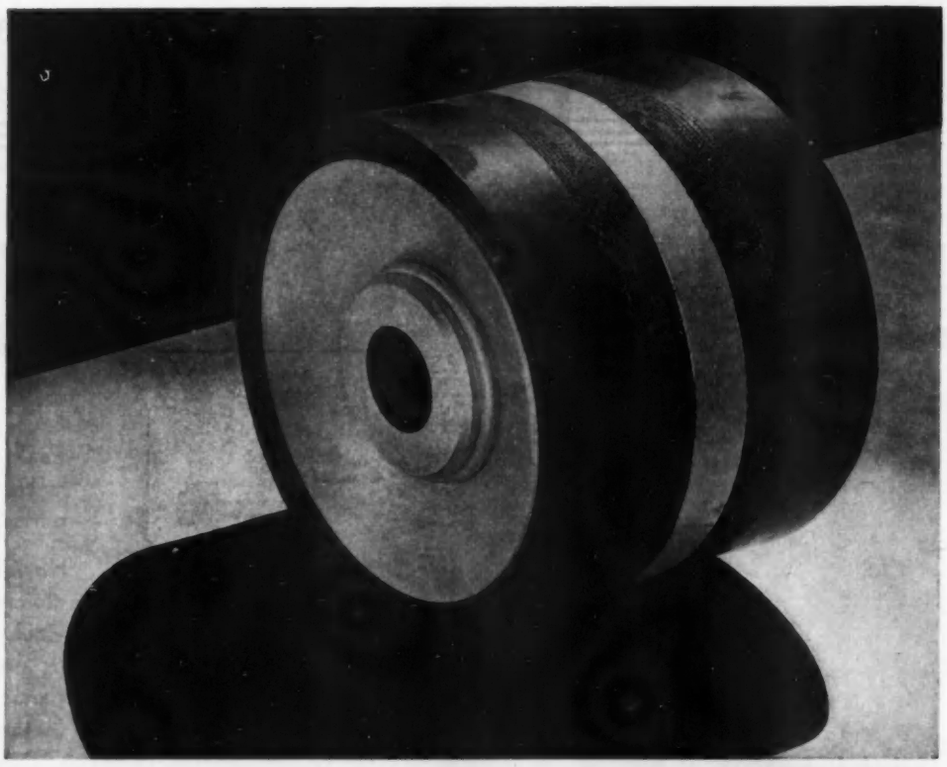
A BACKGROUND *of* SAFETY *and* EXPERIENCE

has been recorded on hundreds of blue prints and Christmas Tree studies... and is yours when you call in a GRAY-KEROTEST REPRESENTATIVE

GRAY-KEROTEST

Gray Tool Co. Houston Texas. Kerotest Mfg. Co. Pittsburgh, Pa.

Mission OIL FIELD PRODUCTS



PISTONS

MISSION.....

Made in Line With the Mission Policy . . . .

"If a product designed by Mission is not proven superior, Mission will not produce it."

SINCE THE ANNOUNCEMENT OF THE NEW, IMPROVED MISSION PISTON the marked increase in sales to an exceptional number of new and satisfied customers has substantiated the statement that the Mission Piston is now the most economical to operate.

A TRULY WORTHY COMPANION
OF THE FAMOUS MISSION VALVE

MISSION MANUFACTURING CO.

2416 RAILROAD ST., HOUSTON, TEXAS Telephone Fairfax 6176

MISSION SLIPS — MISSION VALVES — MISSION PISTONS — MISSION PISTON RODS
Exclusive California Distributors: SECURITY ENGINEERING CO., WHITTIER, CALIF.

Favorable Statistical Position

Attained in 1934; Improves Prospect

JACK LOGAN
Associate Editor

THE statistics of the petroleum industry for 1934, featured in this issue, are predominantly favorable, and they offer encouragement that 1935 will be similarly or more satisfactory.

Demand for oils continued during 1934 on the upward trend that was resumed in the latter portion of 1933, reflecting the general progress out of the depression. Along with the favorable demand situation went, moreover, a good situation with regard to balancing supply with the demand, the output of crude oil and also of refined products having been held in restraint during 1934 to such extent as to bring about important reductions of stocks.

The restraint practiced at wells and refineries promoted favorable markets, and generally satisfactory prices, coupled with increased volume of business, resulted in the highest earnings in the industry since 1930.

Crude oil prices remained constant during the year at levels profitable to the producers, and the producing branch of the industry enjoyed especially satisfactory results. Refinery prices were at considerably depressed levels during several periods of the year, due largely to production and refining of hot oil, and the refining branch of the industry was consequently at a distadvantage. Service station prices were abnormally low for several months early in the year on the Pacific Coast, and in the Mid-Continent and East a similar period late in the year, with price wars resulting from influx of hot gasoline and from controversy between major and independent companies over differentials between their postings. But aside from those limited periods, retail prices were generally satisfactory, and the marketing branch of the industry fared accordingly.

Highest Demand for Four Years

TOTAL demand for United States petroleum in 1934 is indicated to have been the highest since 1930. Bureau of Mines figures are not yet available covering December. But for the first 11 months of 1934, the total demand for all United States oils aggregated 945,785,000 barrels. Corresponding 11-months' figures for earlier years included 892,321,000 barrels in 1933; 863,646,000 barrels in 1932; 946,786,000 barrels in 1931; 977,109,000 barrels in 1930. While the 11 months demand for 1934 was slightly lower than in 1931, the full 12 months' figure for 1934 will apparently be greater than the full 1931 total. (In November, 1934, the total demand was 89,863,000 barrels; in November, 1931, with demand on the decline, it was 80,038,000 barrels.)

The large increase of 53,464,000 barrels, or approximately 6 percent, in the 1934 11-months' demand figure over the previous year resulted primarily from a sharp expansion of domestic consumption, although there was also some increase in export business, involving both crude and refined oils. (Crude oil exports in the 1934 period rose to 38,691,000 barrels from 33,948,000 barrels in 1933, and refined oil exports to 67,186,000 barrels from 64,190,000 barrels.)

The total of *domestic* demand for all oils for the 11 months of 1934 was 839,908,000 barrels, compared with 794,183,000 barrels in 1933, an increase of 45,725,000 barrels, or 5.7 percent. Conspicuous in the breakdown of the domestic demand by products, was an increase, greater than the average, for motor fuel, the industry's leading product and revenue-producing item. The domestic demand for motor fuel in the 11 months was 375,752,000 barrels, compared with 348,431,000 barrels in 1933, an increase of 7.8 percent.

There were also important increases in domestic consumption of most of the other refined products. Kerosene demand in the 11 months of 1934 aggregated 39,209,000 barrels, compared with 34,333,000 barrels in 1933. Gas oil and fuel oil demand rose to 298,098,000 barrels, from 285,385,000 barrels; lubricants to 17,094,000 barrels from 15,507,000 barrels; asphalt to 12,447,000 barrels from 11,047,000 barrels; road oil to 7,711,000 barrels from 5,036,000 barrels. The exceptional products, which met with lower demand in 1934 included wax, which for the 11 months had demand of 795,000 barrels, compared with 1,145,000 barrels in 1933; coke, down to 6,863,000 barrels from 9,177,000; and still gas, down to 40,578,000 barrels from 41,655,000 barrels.

Sources of Supply Under Control

IN meeting the higher demand for oils in 1934, there was close balancing of supply against the demand, effective control having been exercised over the three sources of supply: domestic production, imports, and storage. Both domestic production and imports were higher than in 1933, but they were sufficiently low, nevertheless, to fall under requirements; and in fulfilling the total demand, large draughts were made upon the stocks of both crude and refined oils.

United States crude oil production in 1934 was about 4,400,000 barrels higher than in 1933 and the highest on record except the 1929 output. The 1934 total is indicated to have been approximately 910,051,000 barrels, using official Bureau of Mines figures for the first 11 months of the year and estimating December with the aid of American Petroleum Institute weekly reports. This figure compares as follows with Bureau of Mines totals for earlier years:

United States Production

Year	Barrels
1926	766,504,000
1927	901,129,000
1928	901,474,000
1929	1,007,323,000
1930	898,011,000
1931	851,081,000
1932	785,159,000
1933	905,656,000
1934 (preliminary)	910,051,000

In its weekly estimates of production, the American Petroleum Institute has not attempted to include oil which may have been surreptitiously produced. Statistics compiled with those reports as the basis indicate, consequently, production of only 880,335,812 barrels in 1934. The difference between the two sets of figures indicates that at least 30,000,000 barrels of oil

was produced surreptitiously or clandestinely during the year, about the same as in 1933, a high proportion of such output for both years having been from the East Texas field. (The Bureau of Mines basis indicated about 181,183,000 barrels production for East Texas in 1934; the A. P. I. basis, 158,370,-100 barrels). It should be noted, in this connection, that the A. P. I. omits only underhand production, covering which weekly reports or reliable estimates are not available. There are some excesses above federal or state government allocations that are duly reported and consequently show up in the A. P. I. reports.

The surreptitiously produced crude oil and products made therefrom undoubtedly contributed in large measure to the relatively unsatisfactory refinery prices on gasoline during much of 1934. Similarly, the clandestine producing and refining was at least partially responsible for the retail gasoline price wars of the year.

While United States crude petroleum production was slightly higher in 1934 than in 1933, domestic output of natural gasoline and benzol also increased. In the first 11 months of 1934, the natural gasoline production aggregated 32,981,000 barrels, compared with 30,789,000 barrels in the corresponding 1933 period. Benzol production meanwhile increased to 1,477,000 barrels from 1,248,-000 barrels.

Imports Slightly Higher

INCREASES in imports for 1934 were relatively small. During the first 11 months, crude oil imports aggregated 30,404,000 barrels, compared with 29,017,000 barrels in the 11 months of 1933. Refined products imports amounted to 13,691,000 barrels, against 12,659,-000 barrels. Corresponding Bureau of Mines figures on imports during December, 1934, are not yet available. But American Petroleum Institute weekly reports on imports indicate that total imports, not separated as to crude and refined oils, aggregated 4,173,000 barrels in December, 1934. When that A. P. I. figure is added to the Bureau of Mines figure for the first 11 months, it is indicated that total imports of all oils into the United States in 1934 aggregated 48,268,000 barrels, or averaged 132,241 barrels daily. In 1933 the imports had totaled 45,394,000 barrels, or 124,367 barrels daily.

In the following table are presented figures on imports in earlier years:

Imports of Oils Into the United States

Year	Bbls. Crude	Bbls. Refined	Bbls. Total
1927	58,383,000	13,353,000	71,736,000
1928	79,767,000	11,790,000	91,557,000
1929	78,933,000	29,777,000	108,710,000
1930	62,129,000	43,489,000	105,618,000
1931	47,250,000	38,837,000	86,087,000
1932	44,682,000	29,812,000	74,494,000
1933	31,893,000	13,501,000	45,394,000
1934 (Preliminary)	.....	.....	48,268,000

Stocks Decline Substantially in 1934

WITH both domestic production and imports effectively restricted, new supply of oils was not held merely in conformity with demand, but substantially below the demand. A considerable part of the demand was met, instead, through withdrawals from storage. There resulted, consequently, substantial reductions of the stocks of both crude oil and refined products.

Stocks have been shrinking, in fact, with some interruptions, for about five years. By the end of 1934, they had contracted to the lowest levels since the close of 1926, or to the lowest point for eight years.

During 1934, the total stocks of all oils in the United States are indicated to have decreased roughly 37,000,000 barrels, with relatively large declines occurring in crude oil and fuel oil stocks, but with stocks of motor fuel and other products also showing material reduction. In round numbers, the stock reductions are indicated to have been about as follows: 15,000,-000 barrels for crude oil, 13,500,000 barrels for fuel oil, 6,000,000 barrels for motor fuel, and 2,500,000 barrels for miscellaneous products.

Government figures are not available yet on stocks later than December 1, but pertinent factors indicate further stock reductions in December. At the beginning of the month the stocks totaled 569,316,000 barrels. They included 341,165,000 barrels of crude oil, 3,714,000 barrels of natural gasoline and 224,437,-000 barrels of refined products. Included among the refined products stocks were 47,516,000 barrels of motor fuel.

The stocks of oils indicated to be on hand at the end of 1934, with December fluctuations estimated, are shown in the following table, in comparison with Bureau of Mines year-end figures for preceding years.

Stocks on Hand at End of Year
(Barrels)

Year	[1]Crude Oil	Fuel Oil	[2]Motor Fuel	Miscellaneous	[3]Total
1927	.....	.....	.....	.....	597,143,000
1928	.....	.....	.....	.....	619,725,000
1929	.....	.....	.....	.....	689,166,000
1930	411,882,000	.....	.....	.....	666,662,000
1931	370,919,000	135,856,000	56,171,000	58,727,000	621,673,000
1932	339,715,000	129,881,000	53,805,000	66,705,000	590,106,000
1933	355,312,000	123,500,000	55,933,000	68,462,000	603,207,000
1934[4]	340,000,000	110,000,000	50,000,000	66,000,000	566,000,000

[1]Exclusive of California heavy crude. [2]Exclusive of unfinished gasoline. [3]Total not classified prior to 1931, as classifications before that year were on different basis, and are consequently not comparable. [4]December changes estimated, latest official figures being as of December 1. Figures prior to 1934 are as reported by U. S. Bureau of Mines.

Drilling Increases in 1934

SINCE relatively few new fields of importance have been discovered in the United States during the past several years, there was increased concern in 1934 regarding oil reserves, and that situation, coupled with favorable crude oil prices, resulted in sharp expansion of drilling activity, in wildcat as well as proved areas.

In the United States during the year 17,508 wells were completed, including oil wells, gas wells, and dry holes. That total was 48.8 percent higher than in 1933, when there were only 11,700 completions, and it was the highest since 1930, when completions totaled 19,848 wells. The 1934 drilling is shown in comparison with that of earlier years in the following table:

Wells Completed in the United States

Year	Number of Wells
1923	20,513
1924	21,713
1925	25,406
1926	28,995
1927	22,301
1928	19,964
1929	23,463
1930	19,848
1931	11,716
1932	14,290
1933	11,700
1934	17,508

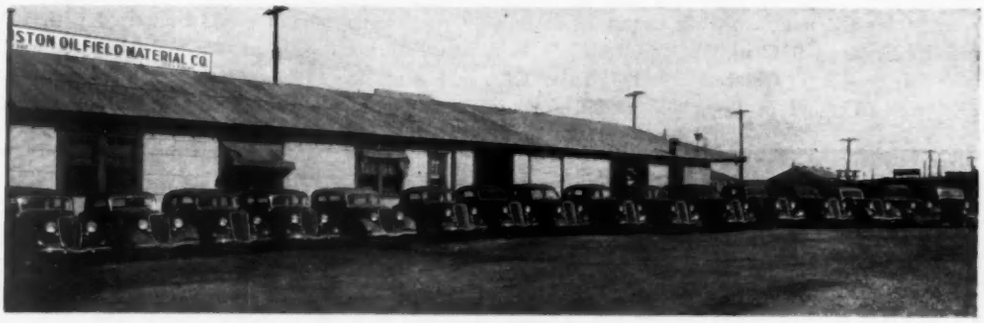
A significant circumstance in connection with the statistics on drilling was a decrease in average initial producing

Resolved—

it's Business we're after in 1935

16 of the 34 Ford V-8s which HOMCO uses exclusively for their dependability, economy and ease with which they take the roughest oil field roads.

HOMCO'S leading man-power, assembled recently in Houston. Bottom row, left to right: Joe Duncan, store mgr., Eunice, N. Mex.; Joe Teuton, store mgr., Houma, La.; Howard Salter, Louisiana salesman; Charlie Smith, dist. mgr., Freer and Sam Fordyce; Albert Peters, store mgr., Kilgore; Herman Moon, Gulf Coast salesman; Carroll Graham, store mgr., Lake Charles; G. W. Hunt, Houston city sales; and W. B. Stallings, store mgr., Houston. Top row, left to right: W. F. Hunt, Kilgore salesman; W. M. Garney, Houston office; J. E. Lassiter, Gulf Coast salesman; Ted Brouilette, Houston office; A. W. Waddill, Houston city sales; George O'Leary, v.p. and sales mgr.; Bob Ewen, auditing and credits; J. E. Peters, sec-treas.; Jack Clark, v.p.; Ed Robertson, Beaumont city sales; and L. L. Talley, Houston office.



More than 50 HOMCO men, equipped with more than 30 Ford V-8s, are at your service this year, with stores at convenient locations from Houma, La., on the east to Hobbs, N. Mex., on the west—from the Mexican border on the south to Kilgore on the north. A HOMCO representative is always near your location.

HOMCO SERVICE represents: (1) Complete line of supplies; (2) A select line of specialties, including EMSCO screen, HOMCO blowout preventers, STANDCO brake lining, JEFFREY rotary chain, HAZARD wire rope, BAROID, AQUAGEL and EL PASO rotary clay, BAKER wall scraper, REGAN crown and traveling blocks; and (3) the Gulf Coast's most complete fishing and cutting tool service.

HOMCO

HOUSTON OIL FIELD MATERIAL COMPANY

HOUSTON, TEXAS

Branches: **Palestine, Kilgore, Freer and Sam Fordyce, Texas; Eunice, New Mexico; Lake Charles and Houma, Louisiana**

Other Stocks: **Cleveland, Louise, Livingston and Refugio, Texas**

Annual Review Statistics for 1934 Commence on Page 47

capacity of wells in 1934, as compared with the three preceding years. That situation reflected less dominance of the drilling picture by the prolific and flush East Texas field, and recovery of field development in other areas to proportions nearer normal. Among the 17,508 wells completed in 1934, there were 11,552 oil wells, with average initiaal daily producing capacity of 2713 barrels per day each. The 7322 oil wells completed in 1933 had average initial production of 2990 barrels daily. The average had been 4873 barrels in 1932, and 4773 barrels in 1931, with East Texas largely dominating the nation's field work; while in 1930 the average had been only 972 barrels daily per well.

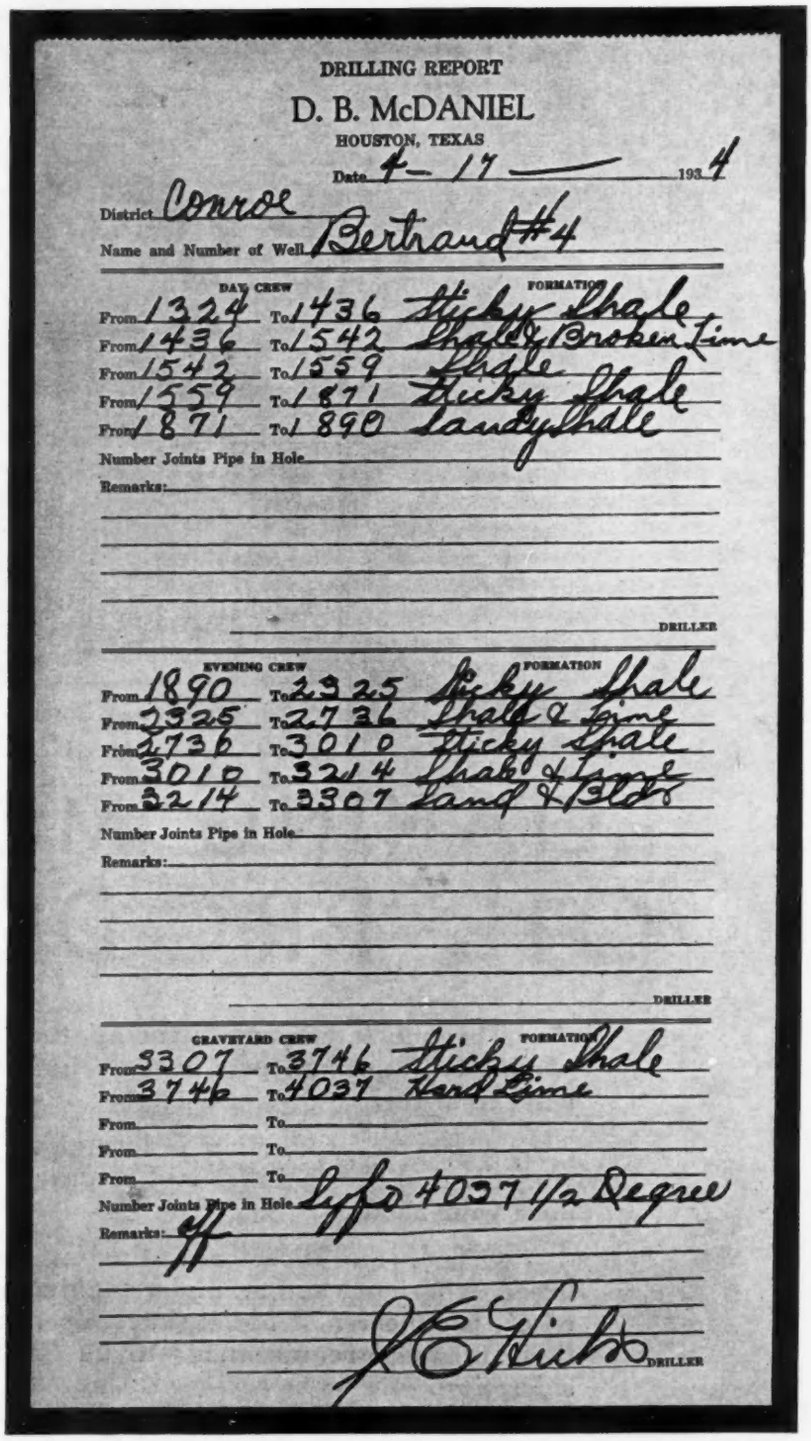
The increase in drilling activity in 1934 was nation-wide in scope, practically all states and sections having shown gains. The five leading oil producing states, Texas, California, Oklahoma, Kansas, and Louisiana, all showed increases around the average for the nation, that is, about 50 percent. Completions rose in Texas to 9912 in 1934 from 6443 in 1933, in California to 675 from 411, in Oklahoma to 1925 from 1204, in Kansas to 926 from 619, and in Louisiana to 801 from 532. Michigan registered a similar increase, completions having increased to 483 from 306. Gains of over 100 percent were recorded for several states, including Arkansas, which jumped to 93 from 38; New Mexico, to 129 from 60; and the rest of the Rocky Mountain States, which had combined completions of 256 in 1934, compared with 104 in 1933. The Eastern States had a considerably increased number of completions, although the percentage of increase was not great, 2265 wells having been finished in 1934, compared with 1933 in 1933. The Southeastern or Eastern Gulf States, including Mississippi, Alabama, and adjoining states, represented the only region not sharing in the expansion of drilling in 1934, having furnished only 43 completions during the year, as against 50 in 1933.

East and South Texas Active

Practically all sections of Texas shared in the increase of activity for that state in 1934. East Texas, including the East Texas field, and South Texas had around 50 percent more drilling in 1934 than in 1933, or around the average for the state. The Texas Panhandle registered an increase of over 300 percent in drilling; North Texas, about 250 percent; and West Texas and East Central Texas, over 100 percent. West Central Texas had somewhat greater activity. The Texas Gulf Coast proved an exception, furnishing slightly fewer completions, but that decline was explained by the fact 1933 work included the development campaign in the large Conroe field, where activity dropped off greatly in 1934. The East Texas completions numbered 3840 in 1934, compared with 2496 in 1933; in South Texas there were 1387 completions, compared with 987; in the Panhandle, 463 compared with 133; in North Texas, 2000 against 894; in West Texas, 583 against 261; in East Central Texas, 196 against 93; in West Central Texas, 419 against 390; and on the Texas Gulf Coast, 1024 compared with 1189.

A production scene in California where an oil stained orange costs the operator five dollars

another HAYSTELLITE RECORD



DRILLING REPORT

D. B. McDANIEL

HOUSTON, TEXAS

Date 4-17 1934

District Conroe

Name and Number of Well Bertrand #4

DAY CREW

			FORMATION
From 1324	To 1436		Sticky Shale
From 1436	To 1542		Shale & Broken Lime
From 1542	To 1559		Shale
From 1559	To 1871		Sticky Shale
From 1871	To 1890		Sandy Shale

Number Joints Pipe in Hole

Remarks:

DRILLER

EVENING CREW

			FORMATION
From 1890	To 2325		Sticky Shale
From 2325	To 2736		Shale & Lime
From 2736	To 3010		Sticky Shale
From 3010	To 3214		Shale & Lime
From 3214	To 3307		Sand & Shale

Number Joints Pipe in Hole

Remarks:

DRILLER

GRAVEYARD CREW

			FORMATION
From 3307	To 3746		Sticky Shale
From 3746	To 4037		Hard Lime
From	To		
From	To		
From	To		

Number Joints Pipe in Hole Lyfo 4037 1/2 Degree

Remarks: Ff

J. E. Fitts DRILLER

Here's the original report of a bit set and faced with Haystellite Inserts and Haystellite Composite Rod which drilled from 1324 ft. to 4037 ft., or a total of 2713 ft.

A new booklet "Haynes Stellite Products in the Oil Fields" tells now to apply Haystellite Inserts and Composite Rod to obtain these remarkable results. Write for your copy today.

PRODUCT OF A UNIT OF UCC UNION CARBIDE AND CARBON CORPORATION

HAYNES STELLITE COMPANY

Unit of Union Carbide and Carbon Corporation

UCC

Chicago · Cleveland · Detroit · Houston · Los Angeles · New York · San Francisco · Tulsa

General Office and Works—Kokomo, Indiana
Foreign Sales Department—New York City

NRA CODE

HAYSTELLITE TRADE MARK

The Cast Tungsten Carbide diamond substitute

Haynes Stellite Welding Rods and information on other Haynes Stellite Products also are available through the 42 apparatus shipping points of The Linde Air Products Company

"The Oil Bank of America"

LOANING MONEY ON OIL PRODUCTION

Through intelligent financing, the National Bank of Tulsa is playing an important part in the sound development of the petroleum industry.

Wherever production is located in the Mid-Continent Field, you will find the facilities and resources of this bank adequate to meet your needs.

Officers and Directors of the National Bank of Tulsa have had broad experience and an understanding of the problems and needs of oil producers. Mid-Continent operators are invited to submit their financial requirements to us for prompt and careful consideration.

NATIONAL BANK OF TULSA

E. I. HANLON, ***Chairman*** TULSA OKLA. **A. E. BRADSHAW,** ***President***

CAPITAL AND SURPLUS $8,000,000 . . . . . RESOURCES EXCEED $45,000,000

Member Federal Reserve System

THE OIL BANK OF AMERICA

Outlook Bright *for Increased Drilling* Throughout Nation

SUBSTANTIAL gain in the number of field operations is forecasted for 1935, although 1934 completions were at a four-year high record. There are a number of factors pointing toward this conclusion, foremost being the crude reserve status of the nation, increased consumption of petroleum products, and the general economic outlook.

During the past two years, petroleum products have been consumed in greater quantities than discovered. This has been due to the lack of outstanding major discoveries and the increase in petroleum consumption during 1934 to a point near the all time peak. Consequently, known crude supplies have been drawn upon heavily, and the nation's crude reserves need to be replenished. Many companies are confronted with an acute necessity of building up their crude oil reserves if they are to be assured of fulfilling future contracts. The general economic outlook also appears to be in a stable position, and companies are willing to proceed with intensive development programs.

The year 1934 showed increased activity in practically all states or major producing districts. Last year a total of 17,508 wells were completed as compared with 11,700 wells in 1933, 14,290 wells in 1932, 11,716 wells in 1931 and 19,848 wells in 1930. With this trend toward increased operations expected to continue, it is likely 1935 completions will exceed 20,000; probably totaling close to 22,500. This would return the industry to its 1929 level, as far as field operations are concerned. Of course, these figures are contingent upon economic conditions; but, here again, as stated, the outlook is exceptionally bright.

Since Oil Administrator Harold L. Ickes is not approving proved field development plans of as large a size as operators desire, wildcatting during 1935 will increase sharply.

Reviews of various districts, or states, which accompany this article, are highly interesting. Outstanding is the outlook for increased operations in every region. It also is noteworthy that several states showed increased recovery during 1934, particularly Kansas and Michigan, which equalled or surpassed their all time peak. Several states, notably New Mexico, and perhaps Kansas, Louisiana and Arkansas, will play a more important part in 1935. From development since discovery to date, it appears that the Cooper area, Lea County, New Mexico, probably was the outstanding strike of the year, with the Fitts area, Pontotoc County, Oklahoma, ranking next. Both of these new fields are yielding prolific producers and are to be the scene of considerable drilling in 1935. Other discoveries of the year, according to present knowledge, were smaller; however many of them will influence future development to a large extent because of the encouragement they have given drilling operations in their respective districts. In the latter classification, this is particularly true of West Texas, South Texas, Central Oklahoma, Western Kansas, and the Gulf Coast district, all of which were the site of a number of new fields.

With the improved outlook for the industry, there also will be a sharp increase in field work on producing properties. Higher crude prices, and indications that they will remain at the present level or will increase, are giving producers an additional incentive for greater production which, together with the declined output of many areas, promises to increase cleaning out or reconditioning work. During the past several years, many operators permitted their wells to go unattended. Now, many of them are reconditioning them and replacing worn out equipment. Although this work will not show up in field development statistics, it will be an important part of field activity for the year.

Extensive Campaign Is Anticipated For Kansas

FLOYD SWINDELL
Staff Representative

EXPANSION of the development program and a widespread geological and geophysical study, principally in the western portion of the state, placed the Kansas petroleum industry on a plane far above the trend of the preceding three years. Indications at the end of the year were that 1935 would stand out as conspicuously above 1934 as did that year above the three years preceding it. During 1934 operators announced 1034 first reports, completed 632 oil wells which added 327,090 barrels to the state's initial production, 21 gas wells with combined initial volume of 231,000,000 cubic feet and 273 dry holes, a total of 926 completions and a success of 71.5 percent.

Included in the activity of the year were 116 wildcat completions which resulted in 23 oil wells with combined initial production of 7831 barrels, two dry gas wells with combined initial volume of 1,000,000 cubic feet and 91 dry holes, all which involved 360,151 feet of drilling. The record of 21.6 percent success in exploratory development adds another favorable accomplishment.

A study of exploration on the basis of distribution over the state shows that 12 eastern counties had 28 wildcat completions which resulted in three small oil wells and two small gas wells; two counties which fall on the dividing line had 17 completions which resulted in three oil wells with combined initial of 1261 barrels; and 20 western counties had 71 wildcat completions which resulted in 17 oil wells with combined initial production of 6479 barrels.

Development in the Burrton-Haury pools of northeastern

"The Oil Bank of America"

LOANING MONEY ON OIL PRODUCTION

Through intelligent financing, the National Bank of Tulsa is playing an important part in the sound development of the petroleum industry.

Wherever production is located in the Mid-Continent Field, you will find the facilities and resources of this bank adequate to meet your needs.

Officers and Directors of the National Bank of Tulsa have had broad experience and an understanding of the problems and needs of oil producers. Mid-Continent operators are invited to submit their financial requirements to us for prompt and careful consideration.

NATIONAL BANK OF TULSA

TULSA OKLA.

E. I. HANLON, *Chairman* — **A. E. BRADSHAW,** *President*

CAPITAL AND SURPLUS $8,000,000 . . . . . RESOURCES EXCEED $45,000,000

Member Federal Reserve System

THE OIL BANK OF AMERICA

Outlook Bright *for Increased Drilling* Throughout Nation

SUBSTANTIAL gain in the number of field operations is forecasted for 1935, although 1934 completions were at a four-year high record. There are a number of factors pointing toward this conclusion, foremost being the crude reserve status of the nation, increased consumption of petroleum products, and the general economic outlook.

During the past two years, petroleum products have been consumed in greater quantities than discovered. This has been due to the lack of outstanding major discoveries and the increase in petroleum consumption during 1934 to a point near the all time peak. Consequently, known crude supplies have been drawn upon heavily, and the nation's crude reserves need to be replenished. Many companies are confronted with an acute necessity of building up their crude oil reserves if they are to be assured of fulfilling future contracts. The general economic outlook also appears to be in a stable position, and companies are willing to proceed with intensive development programs.

The year 1934 showed increased activity in practically all states or major producing districts. Last year a total of 17,508 wells were completed as compared with 11,700 wells in 1933, 14,290 wells in 1932, 11,716 wells in 1931 and 19,848 wells in 1930. With this trend toward increased operations expected to continue, it is likely 1935 completions will exceed 20,000; probably totaling close to 22,500. This would return the industry to its 1929 level, as far as field operations are concerned. Of course, these figures are contingent upon economic conditions; but, here again, as stated, the outlook is exceptionally bright.

Since Oil Administrator Harold L. Ickes is not approving proved field development plans of as large a size as operators desire, wildcatting during 1935 will increase sharply.

Reviews of various districts, or states, which accompany this article, are highly interesting. Outstanding is the outlook for increased operations in every region. It also is noteworthy that several states showed increased recovery during 1934, particularly Kansas and Michigan, which equalled or surpassed their all time peak. Several states, notably New Mexico, and perhaps Kansas, Louisiana and Arkansas, will play a more important part in 1935. From development since discovery to date, it appears that the Cooper area, Lea County, New Mexico, probably was the outstanding strike of the year, with the Fitts area, Pontotoc County, Oklahoma, ranking next. Both of these new fields are yielding prolific producers and are to be the scene of considerable drilling in 1935. Other discoveries of the year, according to present knowledge, were smaller; however many of them will influence future development to a large extent because of the encouragement they have given drilling operations in their respective districts. In the latter classification, this is particularly true of West Texas, South Texas, Central Oklahoma, Western Kansas, and the Gulf Coast district, all of which were the site of a number of new fields.

With the improved outlook for the industry, there also will be a sharp increase in field work on producing properties. Higher crude prices, and indications that they will remain at the present level or will increase, are giving producers an additional incentive for greater production which, together with the declined output of many areas, promises to increase cleaning out or reconditioning work. During the past several years, many operators permitted their wells to go unattended. Now, many of them are reconditioning them and replacing worn out equipment. Although this work will not show up in field development statistics, it will be an important part of field activity for the year.

Extensive Campaign Is Anticipated For Kansas

FLOYD SWINDELL
Staff Representative

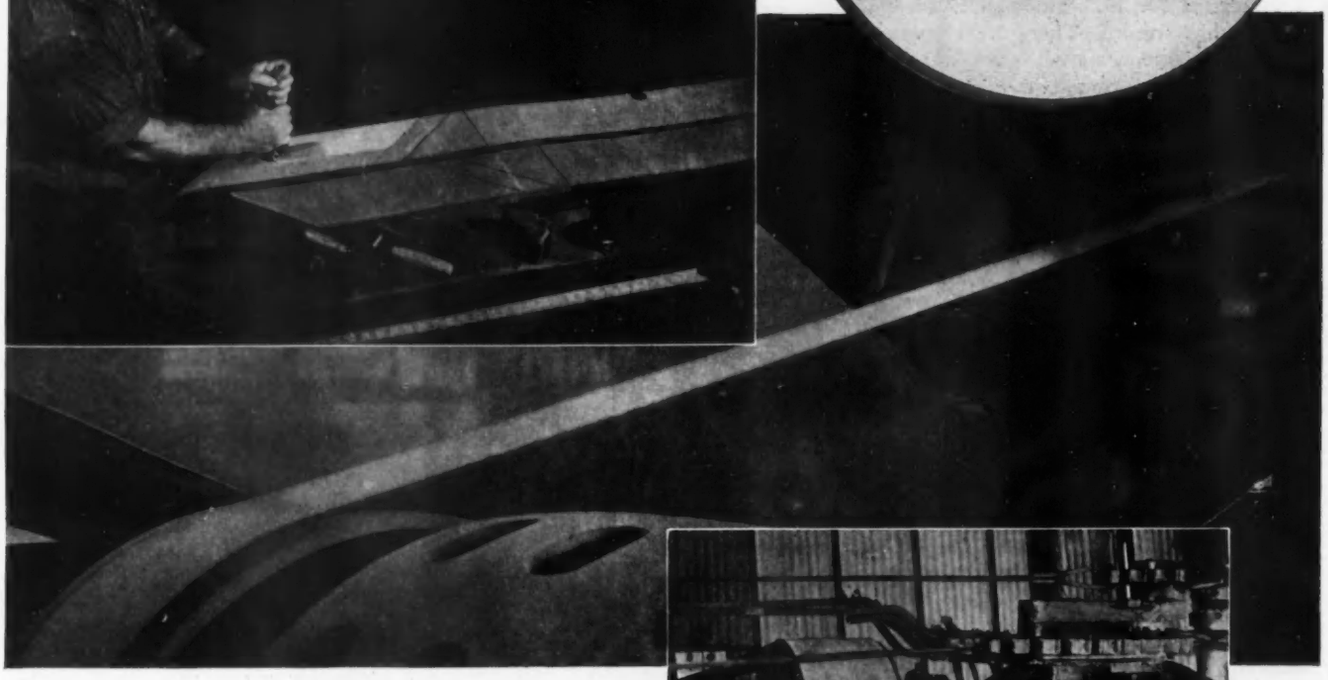
EXPANSION of the development program and a widespread geological and geophysical study, principally in the western portion of the state, placed the Kansas petroleum industry on a plane far above the trend of the preceding three years. Indications at the end of the year were that 1935 would stand out as conspicuously above 1934 as did that year above the three years preceding it. During 1934 operators announced 1034 first reports, completed 632 oil wells which added 327,090 barrels to the state's initial production, 21 gas wells with combined initial volume of 231,000,000 cubic feet and 273 dry holes, a total of 926 completions and a success of 71.5 percent.

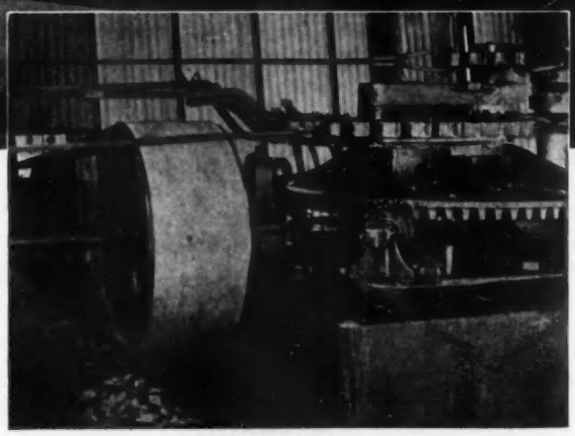
Included in the activity of the year were 116 wildcat completions which resulted in 23 oil wells with combined initial production of 7831 barrels, two dry gas wells with combined initial volume of 1,000,000 cubic feet and 91 dry holes, all which involved 360,151 feet of drilling. The record of 21.6 percent success in exploratory development adds another favorable accomplishment.

A study of exploration on the basis of distribution over the state shows that 12 eastern counties had 28 wildcat completions which resulted in three small oil wells and two small gas wells; two counties which fall on the dividing line had 17 completions which resulted in three oil wells with combined initial of 1261 barrels; and 20 western counties had 71 wildcat completions which resulted in 17 oil wells with combined initial production of 6479 barrels.

Development in the Burrton-Haury pools of northeastern

Endless Rubber Belts Now Practical on 85% of Drives





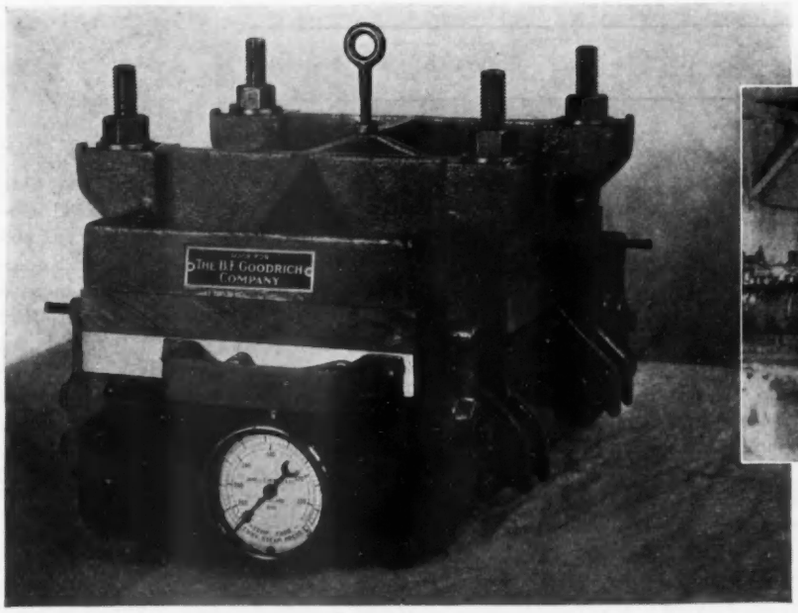
TOP — *Second step in making the new Goodrich Plylock Splice. The tools shown are the only ones needed for the complete operation.*

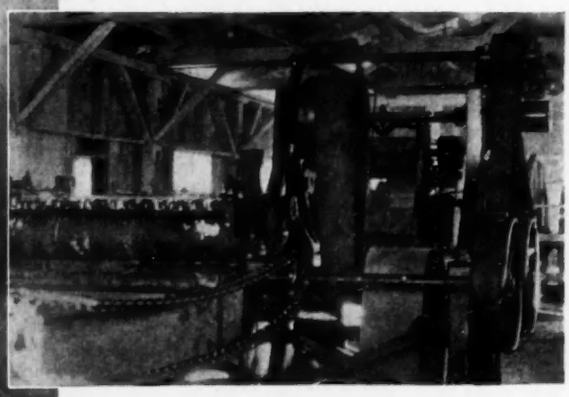
CENTER, ABOVE — *Highflex, driving a suction fan at a mine in the northwest. Operating conditions are extremely dusty but this 14" endless Highflex belt — which replaced 20" leather — has never been off the drive since April, 1930.*

ALL *products problems* **IN RUBBER**

Endless Highflex Belt driving a hand-wheel power in the oil fields. This belt has been adopted as standard by company after company, because of its years of trouble-free service.

Goodrich





Highflex Belt (driving from below), made endless on the machine, in a southern lumber mill.

Portable vulcanizer used in making Highflex Belts endless, on the job, by the Plylock method.

ENGINEERS know that endless belts invariably last 2 to 3 times as long as those with fasteners, and reduce belt cost, deliver more and steadier power, reduce idle machine and employee time. But endless belts have been impractical on most drives, impossible on many.

Now endless rubber belts are practical on any drive with take-up and on many without. With the new Goodrich Plylock Splice* and the portable vulcanizer which Goodrich sponsored, any mechanic can easily learn to make a Highflex rubber belt endless, and then vulcanize it on the machine in a few minutes to a few hours, depending on size of the belt. The belt can be used as soon as it is vulcanized—there is no waiting for cements to set.

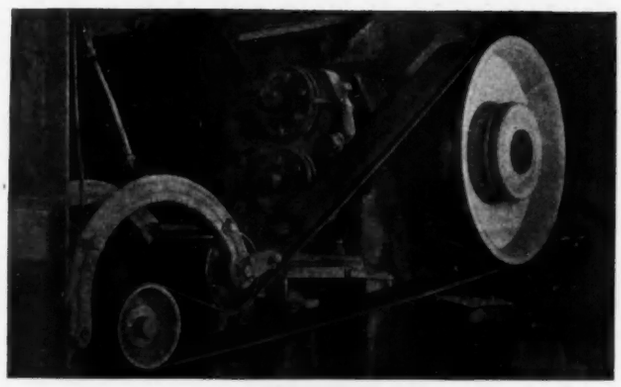
Belts made endless in this way will eliminate 90% of the joint trouble you have formerly had with the best rubber or leather belts, and on most drives will last 2 to 3 times as long.

Good rubber belts seldom fail—the failure has been at the fasteners or at the outside seam in the splice. The new Plylock method does away with fasteners, and gives you a splice in which the outside seam is carried under the surface and protected from wear, strain and windage. This Plylock Splice is better and safer than any leather or rubber splice ever made before, in the factory or in the field.

For such a revolutionary improvement you might expect to pay a high premium, and it would be worth it. But the only cost is a portable vulcanizer ($45 up depending on size). Or your Goodrich Distributor can do the work for you at a reasonable charge.

Call your Goodrich Distributor now. Plylock can begin tomorrow to cut belt costs in your plant.

The B. F. Goodrich Company, Mechanical Rubber Goods Division, Akron, Ohio.



Highflex Endless Belt on crusher drive. Any drive with take-up can now have the economy and long life of endless belts by means of the Goodrich Plylock Splice and portable vulcanizer.

* Patent applied for

Highflex Belting

We are so sure you will find Highflex Belt better, and will want to be able to identify it so you can reorder, that we give it a permanent brand—the *red edge*—the mark of the belt with the 14 new improvements.

Reno County led the state, both in number of wells completed and size of initial production. The Haury pool was discovered by Study and Turner's Haury 1, NEc SW 1-23s-4w, completed for 23,000,000 cubic feet of gas in Mississippi chat at a total depth of 3333 feet on September 16, 1930. The Burrton pool to the immediate south was discovered by Continental Oil Company and Shell Petroleum Corporation's Blake 1, C SW SE SE 23-23s-4w, completed for 9,800,000 cubic feet in Mississippi chat at 3308½ feet on April 24, 1934. On February 16, 1931, Lloyd et al's Haury 1-C, C SE SE NW 1-23s-4w, was completed for the first oil well in the Haury pool when it made 337 barrels of oil and 7,000,000 cubic feet of gas from 3364 feet in the chat. Development around these wells was slow since there was not an extensive market for the gas and the oil wells were small initially. The area received its big impetus on March 28, 1934, when Sinclair Prairie Oil Company recompleted Base 1, C SW SE 26-23s-4w, in the Burrton pool, flowing 1056 barrels initially from Hunton lime at 3591 feet. This was the first Hunton lime production in the area and it proved the most important discovery of the year in Kansas. On January 1, 1935, the two pools had been joined by development. There were on that date 37 Hunton lime producers with a combined 24-hour potential of 92,444 barrels and 65 chat wells with a combined potential of 12,265 barrels, a total of 104,709 barrels, making it the largest flush pool in the state. At the end of the year the area had eight locations, four rigs and 29 drilling wells.

Other areas that were under active development and which were due to continue active during 1935 were: the Russell and Neidenthal pools of Russell County, both 1934 discoveries; the Hilger pool of southeastern Reno County; the Grove pool in southwestern Rice County; the Graber pool of southeastern McPherson County; and the Ritz-Canton pool, where much of work was deepening or reconditioning. Activity in the eastern portion of the state was scattered and nothing of great importance seems to have been found during the year.

Pipe Line Construction

The only construction job of major importance, either in Oklahoma or Kansas, was done by Stanolind Pipe Line Company on its main system between Hominy, Oklahoma, and Fontana Junction in Lynn County, Kansas, and between Humboldt in Allen County and Atlantic Junction in Rice County. This job involved the taking up of 67.3 miles of old six-inch and 149.52 miles of old eight-inch and the relaying of 216.85 miles of old pipe in the new system along with several short sections of new line. This construction was described in detail on pages 29 to 31, July 23, 1934, issue of THE OIL WEEKLY. Other construction work in the state involved mostly new lines to discovery wells in the western counties.

Prospects

The year 1935 should be one of the best Kansas operators have experienced in many years. That all operators both large and small are getting ready for an extensive campaign is evidenced by the widespread activities of geological, geophysical and land departments of the companies. Kansas operators know from years of experience that the only way to maintain the state as a major producer is by the continual uncovering of new pools. This is especially true in the western portion where most of the producing horizons are limestone that yields its content readily and usually is completed on the pump. Despite the fact that much of the production is long-lived, the early months of production usually bring a very rapid decline which can be offset only by new production. Recent discovery of oil in Scott County, in the Western Kansas Basin undoubtedly will initiate considerable development in that portion of the state if outlets are provided. The Burrton-Haury pool should reach its development peak during the year and the new pools of Russell County should climb to a position of importance. Aside from the development expected in the pools discovered during 1934 nothing definite can be said. There are, however, a large number of blocks under lease and a large number of exploratory tests planned for the early months of the year.

South Texas Outlook Is Brightest In History

EARL S. POST
Staff Representative

SOUTH TEXAS, an area lying west of Wharton County and south of Falls County, enters 1935 with probably the brightest outlook for activity of any years in its history. While it lacks the heavy drilling campaigns of Greta and Government Wells, which were underway a year ago, nearly a score of smaller areas are being developed to their fullest degree.

Wildcatting, likewise, is expected to maintain its rapid stride attained during 1934. As the new year progresses, there is little doubt but what the peak of all times in wildcat operations will be reached.

The year 1934 was one of unusual success for wildcatters, with nearly two score strikes being made. They included more than 20 new fields and as many new sands in already proved areas. Hidalgo, Calhoun, Travis and Frio counties received their first production through completion of wildcat producers.

Well in excess of 200 active operations, including wildcat and field work, were reported in South Texas as of January 1, 1935, compared with hardly more than half that number at the opening of the preceding year. Likewise, in the year 1933, 5000 feet was the limit of wells being drilled at that time with a few going to 6000 feet. On the other hand, 1934 saw the depths increased to 10,000 feet.

The past year's main discoveries were along what is referred to as the Jackson trend, comprising the Pettus and Mirando districts. West Tuleta, Caeser, Cole (Bruni), Dirks, McNeill, Comitas, all producing from the Jackson series and below, offer interesting and extensive developments.

The lower Coastal area, or Oligocene zone, offered a number of strikes, including Vanderbilt, new Regugio sands, Tomoconnor, McFaddin oil sand, Sinton, and Samfordyce. The latter field probably offered the most important play inasmuch as it opened a vast new territory for exploration as well as providing a new oil area.

The Balcones fault zone was not too exciting during 1934, although several excellent serpentine plugs were developed in Travis, Williamson and Bastrop counties. Navarro sand production was extended into Frio County with

It's the

WATER ABOVE THE DAM THAT HAS THE POWER

No money is made living over again the events of last year, whether they were profitable or profitless. That is water below the dam.

Money is made by using to the fullest the water that is now above the dam . . . the possibilities of 1935. There is more pleasure and more profit in setting down figures and plans of wells to be drilled, of time-saving and money-saving equipment to drill them, devising more efficient methods . . . a whole lot more than by boasting over profits of the past, made perhaps despite many inefficiencies, or by regretting losses of the past due largely to the philosophy of false economy and buying cheap equipment or using worn-out equipment, resulting in the invariably greater cost because of delays, breakdowns, and non-correlation with other equipment.

The* NORVELL-WILDER MAN *brings you optimism. He leaves the water below the dam to "has-beens". He suggests matched money-saving equipment to 1935 money-makers who realize that only water above the dam has power.

NORVELL-WILDER QUALITY AND SERVICE SUPPLY CO.

Norvell-Wilder *Supply Company*

ANNOU

THE

SUPER WILSON-SNYDER

SLUSH PUMP

This pump is our answer to a demand for a larger Wilson-Snyder Slush Pump.

All the field proved and time tested features that have given Wilson-Snyder pumps their high average for economical, reliable, and continuous performance are combined in the Super Wilson-Snyder. The fluid end has the combination suction convenience of two side suction connections plus one at the end.

The Super Wilson-Snyder is offered as the last word in large capacity heavy duty slush pumps.

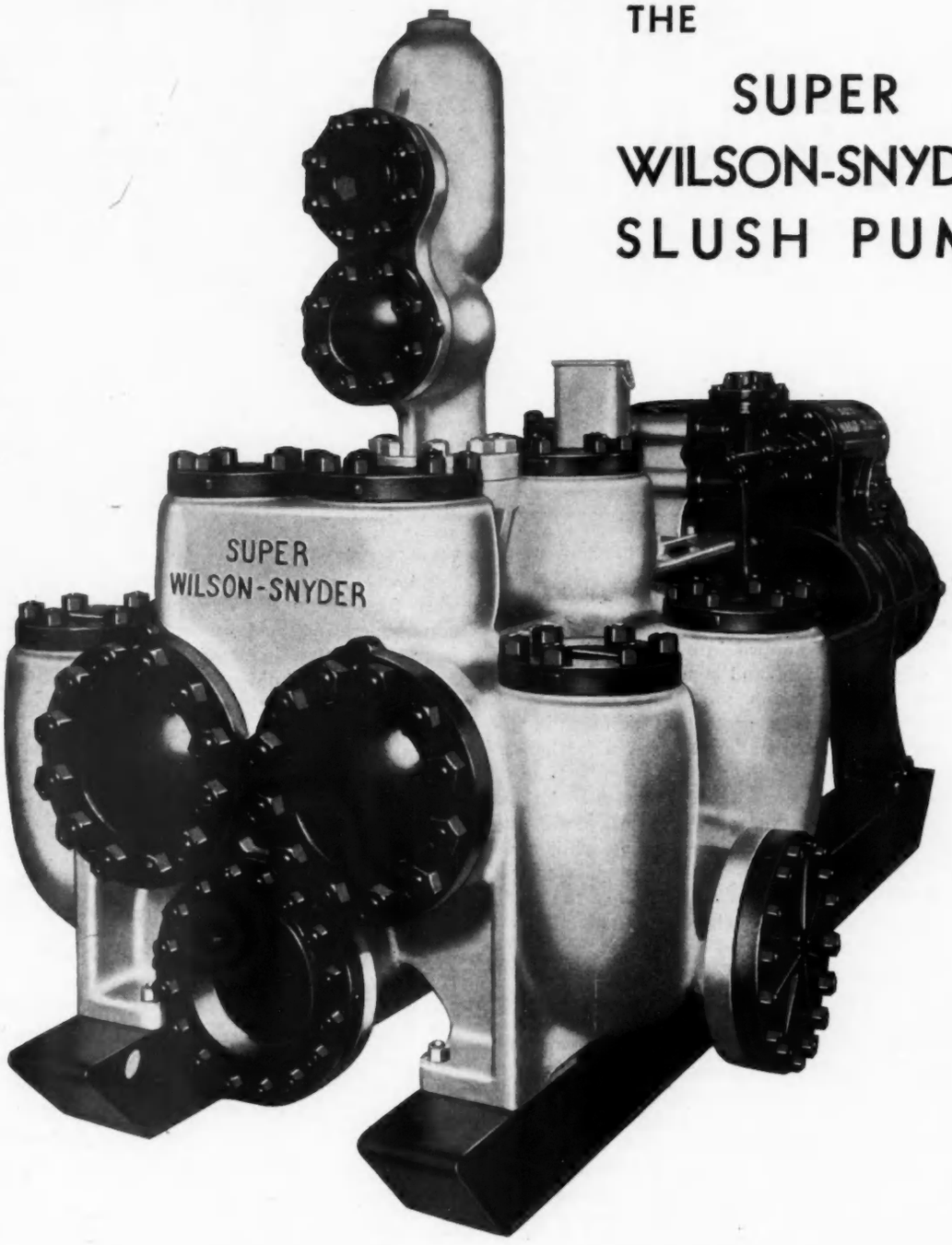
Our customers and friends in the Gulf Coast area can inspect this pump at the Houston headquarters of the Wilson Supply Company

WILSON-SNYDER

NCING

THE

SUPER WILSON-SNYDER SLUSH PUMP



A larger size, Wilson-Snyder Slush Pump for greater mud volume

Now on display at the Wilson Supply Company's warehouse, Houston, Texas

WILSON-SNYDER

Amerada Petroleum Company's strike. It opens an area for play.

The hill country, or lower Edwards plateau, did not provide a new field during the year, but the showing of a wildcat on the Love ranch in the Pennsylvanian brought this area back into the limelight.

The above list does not include all fields discovered, nor does it mention the numerous gas areas, which may be developed with oil when drilled on the flanks. It also does not refer to numerous extensions of production offered to fields, ranging from a location to several miles.

The new year, as has been mentioned before, is looked to as a wildcatting year. In the hill country, for instance, there are a number of large blocks held by major companies and large independents. The leases on many of these blocks are to expire within the next two years. As a result, extensive plans are being made to thoroughly test them. In many cases several deep wells will be drilled. One company has six blocks in the hill country and is drilling the first of a series of 6000-foot holes.

Other areas are in a similar condition. In the more closely developed portions of South Texas, especially along the Jackson trend, wells are being drilled on blocks of only a few hundred acres. Humble Oil & Refining Company, The Texas Company, Magnolia Petroleum Company, Sun Oil Company and others are running at least one rig apiece at all times on wildcat blocks, many of which have been held for years.

The Starr-Hidalgo area popped into the spotlight after the discovery of Samfordyce, and a number of 6000-foot holes are being drilled through the whole general area. Companies have been buying protection acreage in the vicinity of many of the independent's tests, a further attraction for exploration.

Another interesting situation of 1934 was the entrance of a number of independent operators from other districts. Many of them purchased already proved leases, while some developed unproven leases. One company took a proved tract in the Cole field with a program of 32 wells, the whole development campaign, including lease purchase, loading racks, etc., ran in the neighborhood of $500,000. This company had drilled its first well in South Texas only a few months prior to this deal.

Deep Edwards lime, and Trinity sand exploration reached a peak during the year. The trend from Lee County on the northeast to Maverick County on the west was tested with a number of wells to between 5000 and 7000 feet with one going to 10,050 feet in the Trinity. Also, plans have been announced and several wells are now underway to Trinity in the Luling area. These wells will test below 5000 feet. These projects bring to life an important area, which is expected to provide large producing areas.

California Operators Expect Extremely Good Year in 1935

J. R. PEMBERTON
Oil Umpire, State of California

THE outlook for the oil industry in California for the year 1935, is extremely rosy. There is no question whatever but that the benefits of cooperative efforts beginning in the end of 1929 and continuing to the present day, have borne fruit. In the beginning, the cooperative efforts were established because of an enormous day to day surplus of oil created by the bringing in of a number of gusher fields and the loss of a large part of the California export market due to the bringing in of similar fields in Oklahoma and Texas.

California was fortunate in numbering among the individuals connected with the oil business an extremely high percentage of level-headed business men who were willing to accept the facts affecting their business and cooperatively doing what a sane long-pull policy dictated. Looking backward, constant and steady progress can be seen in the cooperative efforts which were begun late in 1929. The process has been one of conversion, one by one, of those who wished to take advantage of the general policy for their own personal gain. The difficulties encountered during the past five years have been augmented by the discovery of several new and prolific oil fields, each of which added to the number of units over which control was desirable and just about offset the continual conversion of belligerent groups to the fold of cooperative operators.

The advent of the Petroleum Code in September of 1933, did little more than to place the federal stamp of approval upon all cooperative efforts during the preceding four years, but because of the federal order through the code, to do what we had voluntarily been trying to do, operators were freed from the demands which had been made by non-cooperating land owners who had insisted on maximum production in some cases of wells covered by the contractual leasehold obligations. A distinct improvement was brought about through the operation of the code.

A recognition by the federal government of the unhealthy condition caused by top-heavy stocks of both crude and refinable oils as a threat to a stabilized market, caused the federal government to place its stamp of approval upon the reduction of these stocks and withdrawals from storage.

The combined effect of all activities since 1929, coupled with the fact that during the last year or two there have been no important oil fields discovered in California, brings the industry at the beginning of 1935 to a point from which there can be nothing but a rosy outlook ahead. Operators are practically unanimous in their willingness to curtail production; refiners are practically unanimous in agreeing that they will buy no oil from any producer unless that producer curtails; the marketing companies for the first time have eliminated their former practices of competitive price cutting of refined products. Stocks of both refined and crude oils have been reduced to an extremely comfortable volume and in fact for all but a few companies, have been reduced even lower than they would desire to have them.

The investigation by the federal government, leading up to the adoption of the Petroleum Code, the investigations which have been made during the life of the code, the stir in Washington leading to the consideration by Congress during the present session of national legislation tending to establish the fact that petroleum is a national resource and therefore needing federal control in insuring the greatest possible benefit to accrue to the Nation through the continuation of this resource, and in California the recent decision of the federal court in establishing the power of the federal government to regulate production of oil from an oil well within the state, all virtually insure an extremely

Complete TRANSMISSION BELT SERVICE.

SUPER EXCELO
OIL COUNTRY BELTING

THROUGH its distributors, Republic serves the oil country promptly and capably with a transmission belt service that meets every requirement.

If an emergency calls for rush delivery—local distributor stores are stocked with Super Excelo in all widths and plies ready to get the right belt to the well without delay. If you face a transmission problem where a belt specialist can be of aid, a trained representative will be right on the job to help you arrive at the best solution for every technical detail.

Super Excelo has given unfailing satisfaction throughout the oil fields and has established a higher standard of efficiency in power transmission. Send your next belt order to a Republic Distributor. He makes a business of studying your needs and knows how to give the kind of service you demand.

Branded with the A. P. I. Symbol and made to specifications that considerably exceed the A. P. I. minimum requirements.

NRA Member Operating Under Approved Code No. 126

Mid-Continent Distributors

FRICK-REID SUPPLY CORPORATION, TULSA, OKLA. THE BOVAIRD SUPPLY CO., TULSA, OKLA.

THE REPUBLIC RUBBER CO. YOUNGSTOWN, OHIO

Manufacturers of Rotary and all other types of Hose, Transmission Belting, Packing, Gaskets, Rings, etc. for Oil Country Service

high degree of stabilization of the industry in California for the forthcoming year.

When we take stock of our oil reserves today, we find that during the past year we have burned up approximately 200,000,000 barrels and yet we have not added through the discovery of new reserves even 10 percent of that amount. We are, therefore, drawing on our reserves at an extraordinary rate in proportion to the discovery of new reserves. Let there be no confusion between reserves and potential. The greatly increased drilling which has been accomplished in the last several months has been nothing more nor less than making available already known reserves, and is only a reflection of the thought in the minds of the owners of large reserves that the time is approaching very rapidly when the reserves must be available. The great increase in potential through the development of these known reserves is, however, in the hands of the larger companies within the State, which are committed to the long-pull policy as compared to intensive present day competition and no trouble is anticipated in the regulation of production because of the apparent present high potential.

The positive assurance that the allowable production is going to be increased very considerably during the coming year would lead one to predict that there will be a scramble for oil from producers by those refining companies vastly in the majority in California, who do not own oil reserves which they can use to supply their refinery requirements. One can also predict a great increase in the amount of wildcat drilling, inasmuch as in a very few years rather definite scarcity of oil will occur in California and before that time comes much better prices will be paid for crude oil and the reward for the discovery of a wildcat well, will be great enough to stimulate considerable wildcat drilling.

To sum up, there seems to be in my mind no doubt whatever but that the California oil industry is over the hump and that in 1935 a degree of optimism and prosperity should exist which has not been seen within the state since the period immediately following the close of the Great War.

Deeper and Increased Drilling Expected in Gulf Coast Area

CHARLES LEYENDECKER
Staff Representaive

As the year 1935 opens, it appears the Gulf Coast will be the scene of deeper and possible increased drilling. The established salt dome type fields will no doubt be explored to a greater extent around the flanks in search for new pay horizons, which activity was successful in the latter part of 1934. Likewise, there is in prospect deep, as well as more extensive, drilling further inland in areas such as the belt along the Conroe trend.

During 1934, a large number of new fields were discovered in the coastal area and these already have come in for increased development. Not only the new fields, but the old established fields point to a higher degree of interest in development around flanks as operators have shown a tendency toward acquisition of flank acreage and drilling for off-side production.

There seems to be no particular portion of the Coastal area in which wildcat drilling is to be confined. On the Texas Gulf Coast wildcatting fluctuates from the so-called Conroe trend down to the salt dome belt. In early 1934, the center of interest for wildcatting was on the trend and in the latter part of the year it shifted to the salt dome belt. Starting off the present year all indications point to the activity going back to the Conroe trend.

Drilling along the Gulf Coast in 1934 has shown a marked increase over that of 1933. In the Texas Gulf Coast area, exclusive of the Conroe field in Montgomery County, drilling shows a 57 percent increase over that of 1933. The Louisiana Gulf Coast showing 87 percent increase.

A statement made by Alexander Deussen, consulting geologist, in The Oil Weekly, July 16, 1934, to the effect that production will be developed in the Gulf Coast during the next few years at depths from 8000 to 9000 feet, also that wells drilled to this depth will succeed in uncovering new and large reserves of oil, has been borne out with discoveries made during 1934 at Roanoke in Jefferson Davis Parish and Bosco in Acadia and St. Landry Parishes of the Louisiana Gulf Coast and in the Texas Gulf Coast, the new Old Ocean field in Brazoria County and the new Dickinson field in Galveston County. These four fields are producing from sands found below 8000 feet.

Deeper drilling on the Gulf Coast is much in evidence at present. One well in the Bosco field of Acadia and St. Landry parishes, South Louisiana, already has reached the 10,000-foot mark. In the Texas Gulf Coast and in the old Goose Creek field of Harris County, one major oil company is drilling a proposed 10,000-foot test for offside production. In Chambers County, a wildcat now is in the progress of going to the above depths. Several wells along the Gulf Coast have been drilled below 9000 feet, showing slight odors of oil. This is indicative that deeper drilling is in store for the area to uncover future oil reserves.

Leasing and geophysical work in the Gulf Coast is being maintained at a high ebb with no apparent likelihood of a let-up. The large number of geophysical crews throughout the entire area is apparently almost constant. In Louisiana, leasing is becoming so numerous and scattered that it is difficult to give a report on all transactions.

Past reports indicate a greater percentage of the activity in the area is on exploration options. With the large number of geophysical crews working in the area, there is no doubt but eventually they will result in the discovery of numerous prospects, which later will cause more wildcatting and possibly the discovery of several new fields. The geophysical work already has resulted in rumors and reports of domes or other types of prospects being located. It is logical to assume that the reliability attached to these explorations presages important discoveries in the future from drilling that naturally will be done within the next three or more years in the more favorable areas.

Within the next few months we should see a sharp increase in drilling due to the fact several of the major oil companies hold enormous amount of acreage under lease at the present time and it would be almost as cheap to drill some of their prospects as it would to hold them for any length of time by rental payments.

New fields discovered in Louisiana were: Roanoke, Jefferson Davis Parish; Bosco, Acadia and St. Landry Parishes; Lake Hermitage, Plaquemines Parish; Gillis, Calcasieu Parish, and Four Isle, Terrebonne Parish. New sands discovered were at New Iberia, Iberia Parish and Lake Washington, Plaquemines Parish.

In the Texas Gulf Coast the new fields discovered were: Splendora, Montgomery County; Van Vleck, Matagorda

County; Hastings, Brazoria County; Old Ocean, Brazoria County; Dickinson, Galveston County; Eureka, Harris County; Kittrell, Houston County and San Felipe, Waller County. New sands, Boling, Fort Bend County; Hankamer, Liberty County; Sour Lake, Hardin County; Port Neches, Jefferson County; South Liberty, Liberty County; Goose Creek, Harris County; West Columbia, Brazoria County and Raccoon Bend, Austin County. The major extensions to the various fields were: Pledger, Brazoria County; Hankamer, Liberty County; Tomball, Harris County and Manvel, Brazoria County.

With the above mentioned discoveries in 1934 and a bright outlook for 1935, the Texas and Louisiana Gulf Coast will offer a different picture at the end of the coming year. With a larger amount of drilling to take place, greater amount of geophysical work, and deeper drilling no doubt there will be even more discoveries than in 1934.

Mid-Continent Texas Expected to Continue Drilling Leadership

H. H. KING
Staff Representative

MID-CONTINENT Texas, including East, North, Panhandle and West Texas districts, continued to drill more wells than any other area or state during 1934, and is expected to continue its leadership during 1935. The East Texas field, of course, is the greatest drilling operation factor. A total of 3600 wells, or approximately one fifth of all wells in the United States, were drilled in this one field during 1934. It is expected to drill as many wells during 1935. Increased operations are expected in West and North Texas, with a continued steady development program anticipated in the Texas Panhandle.

East Texas

The East Texas Woodbine sand belt retained its dominating position in the petroleum world throughout 1934 by reason of the huge yield of crude oil by the East Texas field, which also added approximately 3600 producing oil wells to finish the year with a total of 15,500 producers. Productive limits of the East Texas field were slightly enlarged through operators venturing out into territory previously considered doubtful.

Another year of active drilling is in store for the East Texas field with prospects of between 3000 and 5000 new wells being completed. Actual drilling of the minimum estimate on new wells is contingent upon crude prices remaining near current levels, fairly efficient proration enforcement and continued natural flow of the majority of the completed wells.

Wildcat exploration work in the Woodbine sand belt of East Texas was conducted on a large scale throughout 1934, with the Cayuga field, situated in northwestern Anderson County, topping the list of discoveries. The Cayuga field has since been proved to be the second largest in area for the district, but is not rated as a major strike as the oil producing area is somewhat narrow and so closely related to prolific gas sands that excessive withdrawals convert producers into gas wells. Other discoveries included a small oil pool in Cherokee County, a gas area near Red Lake, Freestone County, and a second gas field in the Buffalo district, Leon County.

Along with a heavy quota of wildcat failures in the Woodbine zone dry holes were also drilled to the Trinity sand horizon on the west flanks of the Mexia and Corsicana-Powell fields to allay a threat of deep production in the first pair of important Woodbine sand producing areas.

North Texas

Variations in the proration allowable of the North Texas district and a mid-summer shortage of water for drilling rigs had a marked influence upon field development during 1934. New discoveries were fewer than usual, and consisted largely of small pools adjacent to established fields. The drouth cut deeply into field activity, especially in the shallow areas in Archer and North Young counties, and when relief was had through rainfall prorations restrictions were increased to such an extent that a general curb on drilling followed.

The district entered the current year with a bright outlook for aggressive exploration in established oil areas as well as wildcat territory, as proration restrictions were partially lifted in December. Oil wells subject to proration in the district were held to five percent of their proratable potential from October 1 to December 1, thereby limiting acid treated wells in Archer County's shallow pools to a top allowable of 24½ barrels daily. The allowable was increased to 10 percent on the latter date, then on December 18 raised to 20 percent, or a top allowable of 68 barrels daily. This somewhat liberal allowable for shallow wells at present price postings is a great inducement for increased development, and it is quite apparent that North Texas operators are going to take advantage of their good for tune during the fore part of 1935.

Texas Panhandle

Steady development program carried on by majors and independents in the Texas Panhandle during 1934 promises to continue without interruption during the new year. Operations have been largely centered upon long established oil and gas areas in the five oil producing counties, where an abundance of proved undrilled locations remain to be taken care of. Drilling of gas wells dropped to a low level during 1934 because of the waste of huge quantities daily in the older areas.

The past year witnessed the development of a great number of prolific oil wells in western Wheeler County, where a few scattered oil wells have produced for some years from the granite wash formation near the 2500-foot level. Development exceeded market demand and pipe line outlets, and for this reason a voluntary curb on drilling has been adhered by property owners.

Completion of two small wildcat oil producers from dolomite lime formation in northwestern Hutchinson County, and a strike on the south flank of the granite ridge in Gray County by The Texas Company on the W. H. Taylor ranch give promise of encouraging considerable new exploration work in the two counties. The district received its first deep test, which proved to be a failure in the Ordovician, or Arbuckle lime, late in 1934 when Phillips Petroleum Company and others completed an 8012-foot failure in northeastern Moore County.

West Texas

Revival of exploration work in established fields and on wildcat blocks was very much in evidence towards the close of 1934 in West Texas. Field work has been more or less held in check throughout the district since the giant East Texas field succeeded the Permian lime basin in leadership on new production about four years ago. An altered outlook now places West Texas again in the limelight through having an incalculable number of proved oil locations awaiting the drill in established

fields along with an attractive offering of wildcat activity along known production trends.

New discoveries made during 1934 in Ector, Andrews, Pecos, Winkler and Jones counties failed to yield a single major oil strike in so far as each area has been explored. Majority of these new pools are situated on production trends, and in some instances will serve as a guide for additional wildcat discoveries.

Search for production in the Ordovician lime horizon, which has proved profitable in the Big Lake field, became scattered over a wide section of West Texas during 1934, with nine tests under way, or authorized. A record depth for Texas was established by one of these projects.

Enlarged drilling programs scheduled for 1935 will center largely upon Ector, Ward, Andrews, Winkler, Howard and Pecos counties.

Increased Production and Drilling Is Forecast for New Mexico

LEA County section of New Mexico made great strides during 1934 in strengthening its position as an important source of flush production in the Greater Mid-Continent, having added one of the few oil fields of major proportions recorded during the year. Oil activity in the state centers on Lea, Eddy and San Juan counties, with the latter yielding small caliber producers and somewhat few in numbers.

Discovery of the Cooper field, situated on a line between the Jal district and Eunice field, during the fore part of 1934 enlivened interest in Lea County, which now has four major oil producing areas and a number of small pools. New Mexico promises to become the fifth or sixth most important oil producing state, and will likely enjoy one of its most extensive drilling campaigns during the current year should the United States Department of Interior adhere to its policy of forcing developments on Federal permits when previously granted extensions start expiring early in the spring.

Reserve Shortage in Oklahoma Causes Increased Field Work

FLOYD SWINDELL
Staff Representative

THE year 1934 will go down in the Oklahoma record as the best since 1930. Shortly after the Code of Fair Competition for the Petroleum Industry went into effect on September 8, 1933, field activities started on an upward trend that has remained unbroken except for a few irregularities. The year saw both major and independent interests active throughout most of the prospective area of the state. Purchase of Slick-Urschel, Inc., properties in the Oklahoma City pool by Carter Oil Company at a figure of approximately $5,000,000; purchase of developed and undeveloped acreage in the Fitts pool by Carter Oil Company, Stanolind Oil and Gas Company and Phillips Petroleum Company, all at high figures, stand out as the most important Oklahoma deals in several years.

During 1935 activity in the state is expected to exceed that of the past year. On the basis of studies made of known reserves it is not overly pessimistic to state that operators have waited too long to start rebuilding crude reserves depleted during the past five years. That they now are intent upon rebuilding the reserve to a point of reasonable safety is indicated clearly by their operations. However, any optimism in connection with possibilities for the new year should be predicated on the continued control of Texas fields, which can change the picture almost overnight.

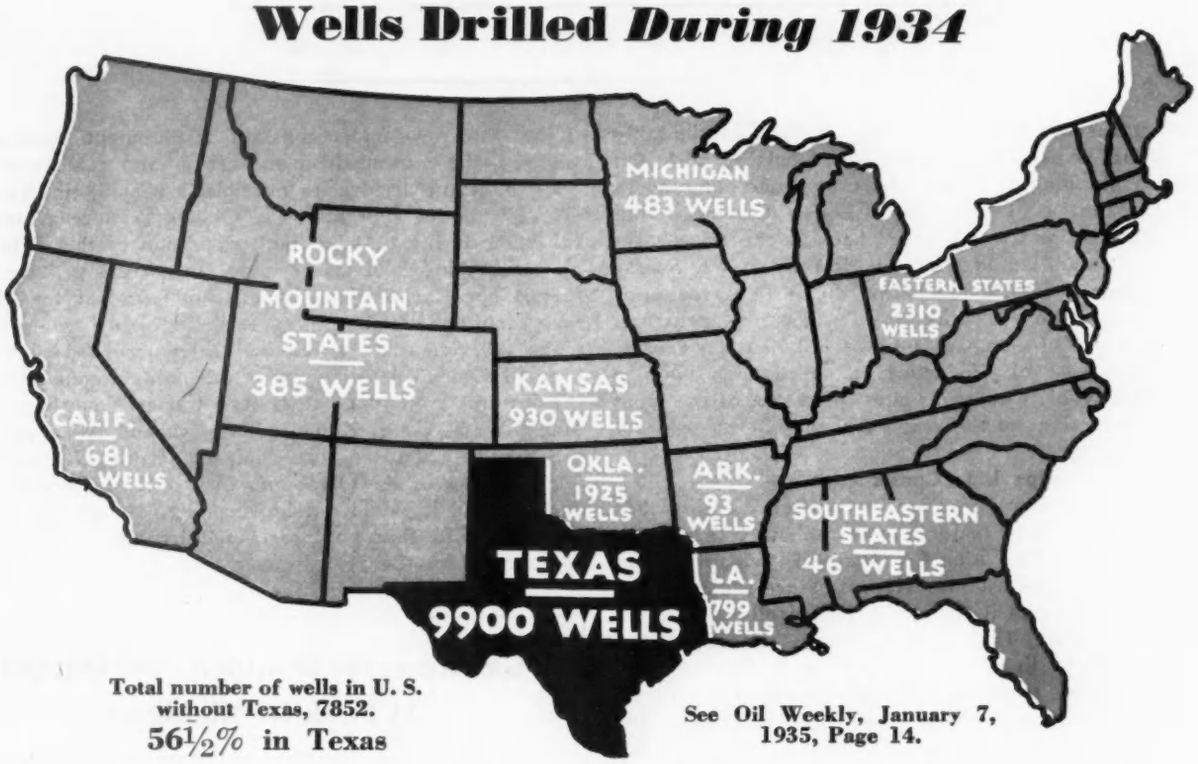
At the end of the year records showed that 2095 first reports had been made in 45 of the 77 counties in the state, and 1925 completions were made. Of this latter number 1222 were oil wells with a combined initial production of 989,927 barrels calculated on a 24-hour base, 95 were gas wells with combined initial volume of more than 500,000,000 cubic feet and 608 were dry holes, a success of about 70 percent. Among the completions were 122 wildcat tests which resulted in 16 oil wells with combined initial production of 7900 barrels, four dry gas wells with combined initial volume of 19,500,000 cubic feet and 102 dry holes, a success of only 16.4 percent.

Outstanding wildcat discoveries of the year, so far as can be determined from the limited number of tests in most of the new pools, were H. L. Wirick et al's Fee 1, Section 29-2n-7e, a Hunton lime producer in the now intensely active Fitts pool of southeastern Pontotoc County; Carter Oil Company et al's Jarvis 1, Section 18-10n-6e, an 1100-barrel well in the Wilcox sand in northern Seminole County; Stanolind Oil and Gas Company et al's Voss 1, Section 28-22n-2w, a 1622-barrel Wilcox sand well in western Noble County; Carter Oil Company's W. H. Dill 1, Section 2-11n-8e, a 720-barrel Cromwell sand well in southwestern Okfuskee County; W. D. Grisso et al's Kenyon 1-A, Section 3-8n-4e, an 820-barrel Hunton lime well in eastern Pottawatomie County; and Gypsy Oil Company's Kelly 1, Section 10-1n-20w, a small gas well in southeastern Jackson County. The latter is of importance because of its location in the southwestern corner of the state, far from established production. Since its completion a small oil well has been completed on the same lease and a widespread lease and royalty campaign has been initiated. Several of the wildcat discovery wells have not been offset and others have shown only small production with considerable amount of water initially.

Principal development in the proved and semi-proved areas was in the Fitts pool of southeastern Pontotoc County, where the most active campaign in the state is now on and where wells as large as 20,000 barrels, initially, are being completed. This area remaining undefined but already proved to be of major importance; the Polo pool of western Noble County with 10 wells completed in the Wilcox sand and the productive limits only partially defined; the South Burbank pool of western Osage County; and the Viola, Simpson dolomite and Hunton lime development around the old St. Louis pool in Pottawatomie County. Activity in the Oklahoma City pool was limited largely to reconditioning but a few new wells were completed in the northern and southwestern portions.

Four new wells, one with a potential of better than 14,000 barrels, were completed in the new Edmond pool, four miles west of Edmond in northwestern Oklahoma County. This pool remains a puzzle geologically and its

Wells Drilled *During 1934*



Total number of wells in U. S. without Texas, 7852.

56½% in Texas

See Oil Weekly, January 7, 1935, Page 14.

OIL EQUIPMENT AND ENGINEERING EXPOSITION

This is the one show where user and manufacturer meet to their mutual advantage. The newest equipment, as well as newer, more efficient operating methods will be on display.

There is more activity in Texas than all the rest of the United States combined, and at Houston, the center of this great activity, you are invited to display your products where they will be seen and purchased by the thousands who will attend.

If you haven't already done so, write today for exhibit space and FREE admission tickets. Address all inquiries to:

HOUSTON, TEXAS

APRIL 8-13

DRILLING
PRODUCTION
REFINING
GAS PLANTS
PIPE LINES

OIL EQUIPMENT and ENGINEERING EXPOSITION
Petroleum Bldg. P. O. Box 490 Houston, Texas

full importance will be revealed only through considerably more drilling. Gypsy Oil Company and Sinclair Prairie Oil Company's Manning 1, Section 3-17n-3w, four miles north of the Crescent pool in western Logan County, found Wilcox sand dry and was plugged back to the Layton series where it made an 18,000,000 cubic foot gasser. So far it is impossible to determine whether this is an extension to the Crescent or Lovell pools or on a separate structure. Sinclair Prairie Oil Company's Cawood 1, Section 27-20n-2w, one mile east of production in the Lucien pool in southwestern Noble County, is considered one of the most important extensions of the year but it may be on separate structure.

Pipe Line Construction

Construction of new pipe lines in Oklahoma during 1934 involved no projects of major importance other than work done by Stanolind Pipe Line Company on its main system from Hominy northward into Kansas. Since most of this project was in Kansas it will be discussed along with the review of that state. There was, however, a large number of relatively short lines and lines of small diameter laid from main systems to new pools and a considerable amount of minor reconditioning work done to older lines. One major project which was discussed during the year but which so far has not reached the construction stage is a line from the Sayre district of Beckham County in the western portion of the state. Lines were laid by several of the major purchasers to the Fitts pool in southeastern Pontotoc County and to the polo pool in western Noble County. In December, Stanolind Pipe Line Company started construction work on an eight-inch welded oil line from its main system at Pauls Valley to the Fitts pool. This was scheduled to be placed in operation shortly after the first of the year.

Prospects for 1935

A considerable amount of exploratory work is scheduled to start early in the year on the Nemaha Ridge trend in what is known as the Central Oklahoma Arch. At the present time several important wildcat tests are under way in this area and a number of blocks are reaching the completion stage. Depths in this area will vary from 5000 to 6500 feet with Wilcox sand the objective in most cases. The year should see the discovery of several pools in the Central Oklahoma Arch area if the expected amount of drilling is done. The Edmond pool, with five wells, should reach its peak of development sometime during the year, and the Crescent pool of Logan County should receive a reasonable amount of attention. The recent completion of a gas well between the Crescent and Lovell pools may cause considerable development if it proves to be on separate structure.

The Fitts pool of southeastern Pontotoc County is expected to set a real record during the year for number and size of the wells completed. This area is complicated geologically, several sub-surface faults already having been located. The extent of its productive area can be determined only by the drill and all indications are that this will be done during the year. In the area to the east of Fitts and throughout what is known as Franks Graben, several blocks have been taken and three wildcat tests are under way. At Centrahoma in central Coal County, one of the major companies has a large block and is reported about ready to announce location for a 7000-foot test. This is a large and prominent structure which has good possibilities of producing.

Throughout 1934 the eastern and northeastern portions of the state were under constant development. This is expected to be continued on an even greater scale with several important discoveries possible, especially in Kay and Osage Counties. Operations in Oklahoma were greatly accelerated during 1934 but with exception of the Fitts pool no accumulations of major importance seem to have been found. The Corporation Commission found at the end of the year that several of the prorated pools no longer would make the potentials which had been accorded them and ordered 30-day open-flow gauges. Notable among these are the Tatums pool in northwestern Carter County, and the Maud, West Asher, Konawa, Sasakwa and Allen pools of the Seminole district. The Simpson, Fault Line and Arbuckle Zones of the Oklahoma City pool are producing to capacity and it would not be surprising to see the Wilcox Sand Zone in that pool restricted by only a small percentage before the year is over.

Gas Reserves Doubled; Oil Output At Peak in Michigan

MICHIGAN became more firmly established as the leading oil producing state east of the Mississippi River during 1934, showing increased potential reserve, greater activity, opening of two and possibly three, new areas and with the highest oil production in the state's history. The year not only brought major advancements in the petroleum industry but also in natural gas development with one major new area opened and an important extension to an older region.

Michigan oil production reached, and passed, the 10,000,000 barrel mark for the first time, with the total year's production estimated at approximately 10,624,555 barrels. Last year's (1933) production totaled 7,848,134 barrels, the previous state record. This production, while comparatively small in comparison with some of the Mid-Continent areas, is of first importance in Michigan and to the Eastern area and in view the fact that Michigan was not producing oil in commercial quantities prior to 1925.

Production in Michigan for 1934 averaged better than 800,000 barrels a month and reached its peak in May with a total of 977,177 barrels.

Michigan's potential production rose during 1934 from about 40,000 barrels daily to as high as 180,000 barrels daily in July. The rise resulted chiefly in the heavy development of the Porter pool in Midland County, which also was the area of chief drilling during the year. This pool accounted for over 75 percent of the state's production and potential production.

Drilling in the Porter pool reached its peak in mid-summer and operations had fallen off to 30 as the year closed. There were 281 wells on production in the pool as of December 31. As now defined the pool comprises approximately 5000 acres. Ultimate recovery is estimated between 5000 and 6000 barrels per acre. Production is from Dundee lime at approximately 3400 to 3460 feet.

The Porter area was opened in 1933 but major development did not occur until the first nine months of 1934. Most of the leases have been produced against back-pressure, both enforced under federal proration and voluntarily. Water encroachment was just becoming a major factor to contend with as the year closed.

Drilling operations in 1934 showed a gain of 162 completions

A Real Test of Coring Efficiency

Elliott Model 34 Rotary Core Drill

Write for latest Bulletin, stating type (rotary or cable tool) of core drill required.

Frequently, in coring operations, various formations are encountered which provide a real test of coring efficiency and core recovery. In strata such as that illustrated, for example, the tough formation immediately preceding the loose oil sand has a tendency to plug the barrel and prevent the recovery of a satisfactory volume of the softer material.

In such strata, and wherever conditions in the hole present a true test of coring efficiency, Elliott performance and recoveries are unsurpassed. There is but one inevitable reason . . . the correct design, high quality materials, and precision manufacture developed by Elliott engineers over a period of more than twelve years of intensive coring and core drill manufacturing experience.

ELLIOTT CORE DRILLING COMPANY
4731 East 52nd Drive, Los Angeles, California, U.S.A.
Export Office: 525 Graybar Bldg., New York City

Elliott ROTARY AND CABLE TOOL CORE DRILLS

over 1933 with a total of 469 completions. There were 126 tests on location and drilling as the year closed and 970 wells on production. A total of 444 drilling permits were issued in 1934 as compared to 429 the previous year.

The record initial production of individual wells was established in the Porter township area of Midland County. Davis Oil Company's Neitzke 6, Section 21, was rated at 14,860 barrels daily for a state record. Other leases produced five and 10 barrel wells.

The outstanding wildcat development for the year was striking of deep Dundee lime production in Gladwin County, northeast of the main Central Michigan Dundee structure as developed. Production estimated between 30 and 50 barrels daily was encountered on M. F. Whitehill's Kintner 1, Gladwin County, 17n-2w-11, in October at 3866 feet. No other test had been completed or drilled to the same producing lime as the year closed but this area probably will be thoroughly tested during 1935 and now appears as the most promising area for development in the state.

Ogemaw County came back for a major play just as 1934 was closing following successful completion of a number of Dundee lime wells. This area originally was opened in 1933 as a Traverse lime field, 1700-foot pay, but activity played out when this formation proved both spotty and irregular.

Later deeper drilling developed commercial production in Dundee lime from 2600 to 2750 feet and with the decline in other areas many operators were moving into the Ogemaw area the last of the year. Twenty-eight tests were drilling as the year closed.

To date production in the Ogemaw County area has been comparatively small, ranging from 10 to 100 barrels. Most wells have to be acid treated after completion in the Dundee due to tight condition of the lime. Long production appears to be indicated, however, from generally greater depths of pay than in other Central Michigan areas.

Minor extensions of old fields were developed in Midland and Isabella counties during the year.

The past year with increased production and potentials resulted in the construction of seven new oil refineries in the state ranging in capacity from 250 barrels to 1500 barrels daily. There were 12 refineries in operation as the year closed and five more under construction.

Two casinghead gas plants, one in the old Greendale field and the other in the Porter field, were constructed.

Opening up of a natural gas producing structure which may extend over a 30 to 40 mile area on a southeast trend in Mecosta and Montcalm counties and the doubling of the gas reserve of the state was another outstanding development of the year.

The Austin field in Mecosta County was definitely proved and put in production late in the year with the completion of American Michigan Pipeline Company's line from the pool to Muskegan, Michigan, a 55-mile line, now handling about five million feet of gas daily.

Wildcatting in Hinton, Millbrook, Martiny, Morton, Belvidire, and Home townships in the Mecosta-Montcalm area indicated presence of another major gas area. Wells in this district range from a half million up to 33 million feet daily. Production is from the Michigan Stray sand from 1300 to 1500 feet deep.

Besides this development the older Broomfield (Isabella County) field was extended northwest and southeast.

At the close of the year there were 86 commercial gas wells in the state with an estimated proved area of 18,700 acres. Recoverable reserves from this area are estimated at approximately 28,750,000,000 cubic feet.

About 50 wildcat tests were completed during the year and while some extensions were proved and favorable showings made in the Lapeer area, the Gladwin County development was the major one.

Increased drilling for natural gas also brought greater use of rotary equipment in the state than ever before. Most of the gas areas have drifts running from 500 to 900 feet, which is now commonly drilled with rotary.

The past year saw the reorganization of the Oil and Gas Association of Michigan and subsequent building of this body into a powerful and important association. It figured in during the year in a number of important matters confronted by the industry as code work, brine control, state legislation, carrying fight against higher taxation on the industry and other matters.

Rocky Mountain Activity Experiencing Upward Trend

DOUBLING of the area of the Cut Bank field, revival of drilling under the stimulus of acid treatment in Kevin-Sunburst, Montana, an increase in wildcatting by major interests, development of black oil fields of Wyoming, and geophysical prospecting and leasing of lands in eastern Colorado brightened the Rocky Mountain petroleum picture during 1934.

The Texas Company's State 1, C NE 16-32n-5w, early in the year completed as a 100-barrel well that extended the Cut Bank field 16 miles southeast, giving it a length of 33 miles between producing wells. The extension well stimulated drilling in the south sector of the field, where 28 successful oil wells were completed, proving up the intermediate territory including the town of Cut Bank, where a townsite drilling campaign now is underway. In the entire field there were 111 completions, 94 of which were oil wells, four were gas wells, and 13 were failures.

So great was the expansion of the Cut Bank field that it absorbed its first pipe line outlet, that of Santa Rita Oil & Gas Company from its Tribal wells in the north to the town of Cut Bank, as a gathering line. The line was purchased by International Pipe Line Company, subsidiary of The Texas Company, as a feeder for its 30-mile line from the field to its refinery at Sunburst. The line, consisting of six-inch pipe, was completed in the first week in August at a cost of $200,000. At Sunburst the pipe line ties into Illinois Pipe Line Company's line to Coutts, Alt., Canada.

A week later Cut Bank was given a second pipe outlet by completion of Toronto Pipe Line Company's 28-mile carrier, consisting of eight-inch pipe, and running directly northeast out of the field to Coutts. The line cost approximately $300,000. Toronto Pipe Line Company was organized as a subsidiary of British-American Oil Company, Ltd., second largest of the Canadian oil companies.

Though two wildcats failed in the south area of Cut Bank, the year 1935 will see further drilling in that area, according to plans of operators holding leases in that territory. Barmac Oil Producing Company's Bruning 1, C SW SW 1-31n-5w, 10 miles south of Cut Bank, and Producers' Development Syndicate's Helgason 1, SE NE 7-33n-5w, four miles east and a mile south of the nearest Cut Bank

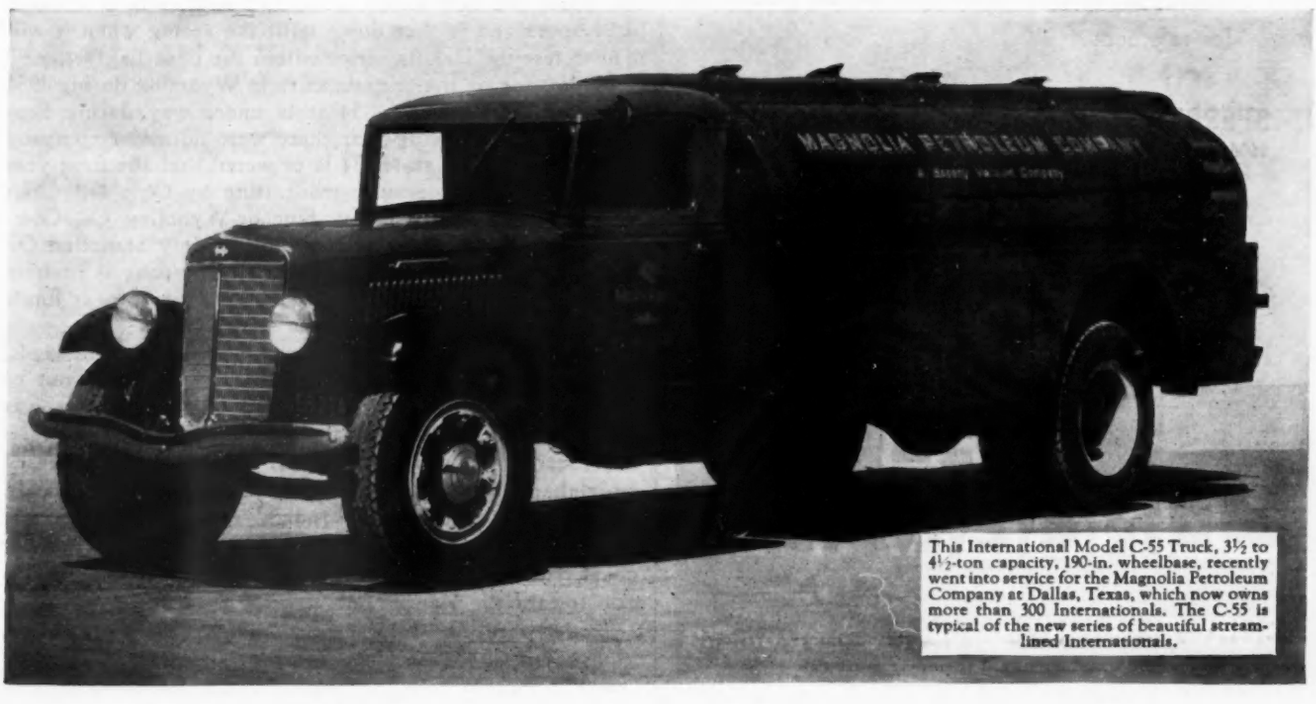
INTERNATIONAL TRUCKS

Have Long Given Users the Benefits of QUALITY Features

● Make any comparison you like as to quality in motor trucks—then you will appreciate the engineering skill and the manufacturing precision inherent in International Trucks. Many features which are now being spotlighted by others as something new have long been standard with International. Replaceable cylinders; exhaust-valve seat inserts; precision-type, steel-backed, removable-shell bearings; replaceable valve-stem guides; full-pressure lubrication; self-aligning, self-adjusting propeller shaft center bearing; roller-bearing, anti-friction-type universal joints; and full-floating rear axles are refinements well known to International users. International can give you all that you expect in a truck, and more, because Internationals are all truck from the ground up. Call on the nearest branch or dealer for complete information. Sizes range from ½-ton to 10-ton.

INTERNATIONAL HARVESTER COMPANY
OF AMERICA
(*Incorporated*)

606 S. Michigan Ave. Chicago, Illinois



This International Model C-55 Truck, 3½ to 4½-ton capacity, 190-in. wheelbase, recently went into service for the Magnolia Petroleum Company at Dallas, Texas, which now owns more than 300 Internationals. The C-55 is typical of the new series of beautiful streamlined Internationals.

Practice makes Profit.
Check your drilling with
SYFO
CLINOGRAPH

The **Syfo Clinograph** is a remarkable device. The records afforded by **Syfo** are direct and accurate—easily and inexpensively obtained without the use of dangerous acids—permanent records on paper that can be filed for reference.

SPERRY-SUN WELL SURVEYING CO.
1608 Walnut Street Philadelphia, Pa.

TULSA, OKLAHOMA
402 Petroleum Building
HOUSTON, TEXAS
3118 Blodgett Avenue
LOS ANGELES, CALIF.
415 Petroleum Securities Bldg.

(U. S. Patent 1,962,634 and others pending)

SYFO
CLINOGRAPH
also
SURWEL & H-K Surveying Instruments

production, both missed the Cut Bank sand. At present The Texas Company is unitizing its leases in the Valier area and will drill a test there in the spring. Montana Power Gas Company, which holds considerable acreage in the area, will drill a test. Drilling in the proved section calls for 1300 wells within the 90 square miles of proved territory with the spotting of one well to every 40 acres. It is estimated by observers that there will be 150 wells drilled in Cut Bank next year.

Acid treatment met with success in the Kevin-Sunburst field, Toole County, Montana, and accounted for 35 completions during 1934, as compared with 16 the previous year. During 1934 31 completions were oil wells, as compared with only six during the preceding year. Outside of the Cut Bank and Kevin-Sunburst fields Montana had little activity.

Drilling activity in Wyoming centered in the black oil fields of the northern part of the state, where 12 wells were finished, one an important extension to the Oregon Basin field, in Park County. Dry Creek Oil Company (Valentine M. Kirk and associates) completed Government 1, SW 2-50n-100w, for 11,000,000 cubic feet of gas in September, proving closure to the south fault block area of the Oregon Basin field. In the proved sector of the field, Paul Stock brought in the largest completion to date, getting 3000 barrels initial in Government 2, SW SE NE 29-52n-100w.

Two new oil fields were discovered in Wyoming late in the year. California Exploration Company's Government 1, NE NE NE 12-44n-97w, proved the Waugh Dome structure, Hot Springs County, when it pumped 583 barrels initial of 27 degree black oil the last week in the year. Fern Oil Company, an affiliation of Midland Oil Company of Denver, is negotiating with California Exploration Company to purchase its production from Waugh Dome, and it is expected that the new field will see the drilling of several wells during the coming year.

The California Company, subsidiary of Standard Oil Company of California, completed Holst 1, NE SE SE 13-17n-77w, on Quealy Dome, Albany County, for 60 barrels initial at 3175 feet. Later, on cleaning liner of swelling bentonite, the well filled remaining 500 barrels of storage in 24 hours and is shut down until the spring when it will drill to test the Dakota series within the next 100 feet.

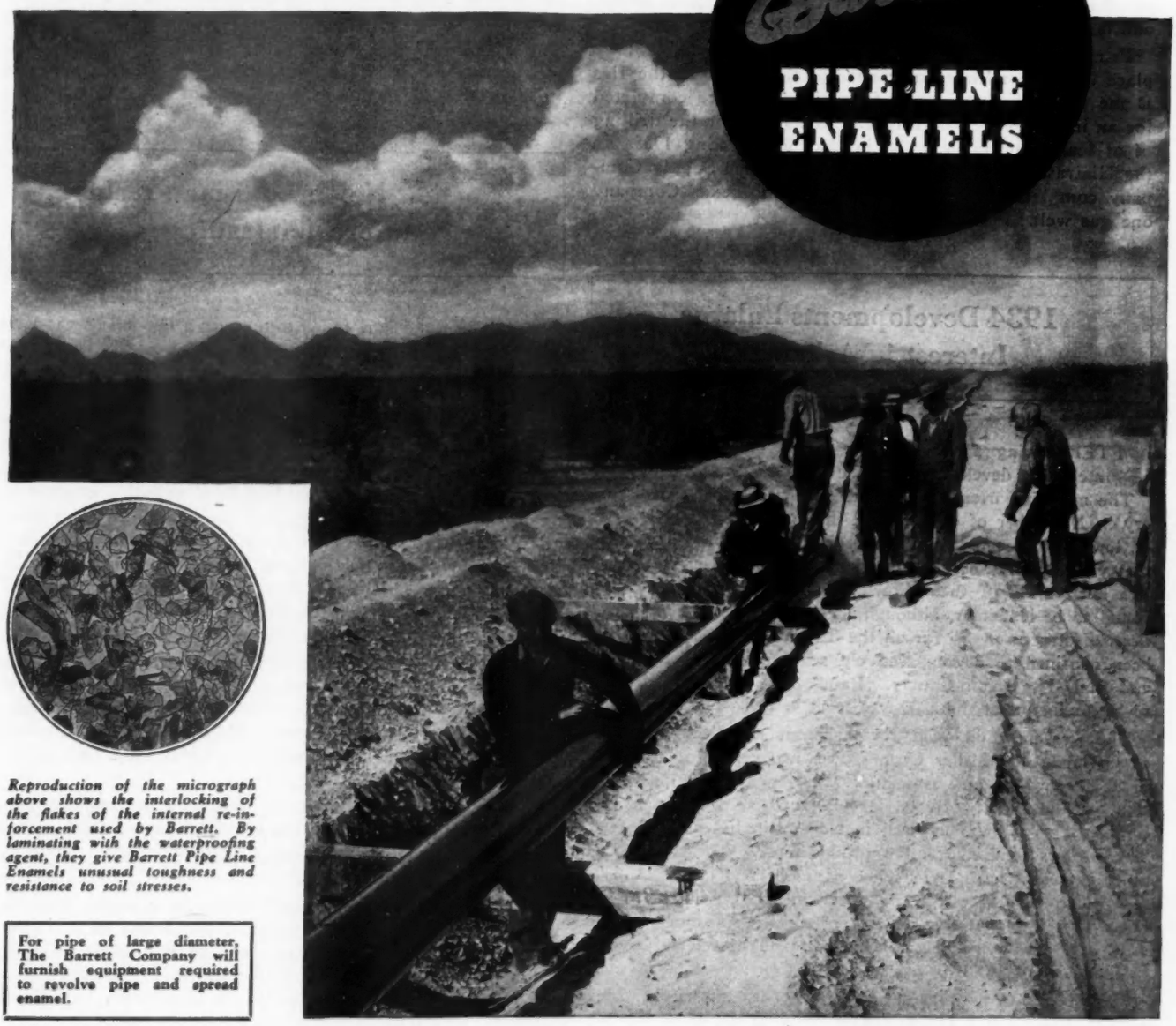
Wildcatting by major companies in Wyoming during 1934 reached a high point of 14 tests under way during September. The preceding year there were no major company tests drilled in the state. It is expected that the next year will see considerable more wildcatting by Ohio Oil Company, The Texas Company, Sinclair-Wyoming Oil Company, The California Company, and possibly Stanolind Oil & Gas Company. At present Ohio Oil Company is running a seismograph survey of Goshen Hole territory near lingle in the southeastern corner of the state.

A change in the Colorado leasing rules on state lands, in which the state no longer withholds 160 acres out of each section and in which the limit of drilling time was extended to 10 years, stimulated leasing activity in the eastern part of the state, and major companies have leased more than 1,500,000 acres of prospective oil and gas lands. Continental Oil Company, Indian Territory Illuminating Oil Company, and The Texas Company are all running geophysical surveys in eastern Colorado, and leasing southeast toward the Kansas line.

There were no Colorado wildcat strikes during 1934, though Oil City Petroleum Company's Garnett 2, NE SW

Barrett

PIPE LINE ENAMELS



Reproduction of the micrograph above shows the interlocking of the flakes of the internal re-inforcement used by Barrett. By laminating with the waterproofing agent, they give Barrett Pipe Line Enamels unusual toughness and resistance to soil stresses.

For pipe of large diameter, The Barrett Company will furnish equipment required to revolve pipe and spread enamel.

Laminated structure gives unique strength and toughness to resist soil stresses

Interlocking flakes of a special non-porous dielectric reinforcement give Barrett Pipe Line Enamels a laminated structure which increases normal strength and resistance to soil stresses. Besides adding resistance to pressure deformation, this unique Barrett flake-type filler supplies greater toughness and flexibility to the coating, and reduces slide and sag in application and service. And because a smaller amount of the filler is required than when the customary ground fillers are used, the proportion of water-resistant coal-tar pitch in Barrett Pipe Line Enamel is proportionately increased. For complete information on protective coatings to match right of way conditions, phone, write or wire.

THE BARRETT COMPANY, 40 RECTOR STREET, NEW YORK, N. Y.

25-33n-52w, in Archeluta County, developed a good showing of oil in the Muddy sand at 960 feet just as the year closed, and is erecting storage preparatory to testing.

Principal Colorado development in proved fields took place in the northwestern corner of the state. In the Iles Dome pool, Moffat County, four oil wells were completed for an initial of 7888 barrels, and plans call for the drilling of at least four more wells in that field during 1935. In the Hiawatha Dome gas field, Mountain Fuel Supply Company completed four gas wells, and The Texas Company one gas well.

1934 Developments Enlarge Interest in Arkansas

AFTER having a very inactive year, Arkansas had three interesting developments in the closing weeks of 1934.

The most important of these developments was the discovery in November of a new sand in the upper red bed series of lower Cretaceous at 3360 feet in the Rainbow City field, that yielded oil. So far 15 producers have been completed in this horizon, 12 of them flowing wells. The sand has been found to be lenticular, although there have been some indications of structure. So far all the Taylor sand producers have been confined to a comparatively small area in Sections 10 and 11-17-14, Union County. Rainbow City was discovered to be productive at the 3200-foot level in 1928.

The first new oil field for Arkansas since the discovery of Garland City, Miller County, was uncovered in December in T. J. Gaughan and associates' M. Braggs 1, Section 25-13-18, Ouachita County, five miles west of Camden, which was completed as a pumping well in Nacatosh sand at 1394 feet. The owners gave the initial production as 100 barrels and other estimates have run as low as 25 barrels daily. A 630-foot south offset tested salt water in the Nacatosh. Four other rigs are operating in this area, one six miles to the southwest of the producer. Gaughan and associates have a block of 4700 acres.

Possibilities of production also have been shown in three tests drilled to the 2100-2200-foot level in Nacatosh in the Hibank area six miles southeast of El Dorado, Union County. The first well in this area in township 18 north, range 14 west, to show for production was being treated with acid when an explosion occurred. The well was not completed as a producer. Two subsequent tests have shown oil in possible commercial quantities at this level. One being drilled by Reuter Oil Company, Incorporated, Kinard 1, SE NW 32-18-14, is being standardized at 2189 feet, and the same company's Vines 2, SW SE 29-18-14, has had six-inch casing cemented at 2150 feet after logging top to Nacatosh at 2154 feet. Under the next four feet of cap rock was seven feet of sand said to have shown oil and 19 feet of sandy shale. The well is being bailed.

There has been some spasmodic wildcatting in Miller and La Fayette Counties, due to the known existence of a fault in that area, and considerable blocking of wildcat acreage has occurred in Ouachita and Union Counties as a result of the developments in Rainbow City and Camden.

During 1934, Standard Oil Company of Louisiana laid a six-inch pipe line to its Arkansas-Baton Rouge, Louisiana, trunk line to the Garland City field, Miller County, to provide that field with its first pipe line outlet. It has a daily run of 1300 to 1600 barrels.

Arkansas had 36 wildcat tests drilled for a total footage of 107,000 feet in 1934, at an estimated cost of $671,000.

No New North Louisiana Fields; More Wildcatting

NORTH Louisiana failed to uncover a new oil or gas field in 1934. However, the year saw the revival of one field that had been completely abandoned and the building back of its daily average production of 530 barrels daily as compared to 600 barrels initial at the time the field was abandoned during the extremely low price of oil in 1932.

New producing horizons were found in the Sligo gas field, Bossier Parish, one at 2800 feet, probable contact of upper and lower Cretaceous, and the other the Glen Rose at 5200 feet. A new sand horizon was found under the oolitic lime of the Glen Rose in the Rodessa gas field, Caddo Parish, which now has sixteen producing gassers, the gas being heavily saturated with oil.

The oolitic lime at 5500-5600 feet in Rodessa was first found in 1930 and the sand at 5800-5850 feet was found in 1934. Its yield is even better than the shollower zone. This field is the deepest in North Louisiana. The year 1934 also saw the extension of this field across the line into Cass County, Texas, which still has only one of the field's producing wells.

The year 1934 saw a sharp decline in activity of both Converse and Zwolle, two chalk rock fields of Sabine Parish, but the production curve was held up somewhat by extensive use of acid in both fields.

The Wolf City sand, found immediately under the Annona chalk at 200 feet at Converse, was found to be rather limited in its producing limits, and carried large volumes of salt water. This sand as far as its productive limits are concerned is limited largely to a narrow strip about a quarter of a mile in width and extending north and south through the townsite of Converse for about two miles.

A mile extension of the 2100-2200-foot producing horizon in the old Caddo field, Caddo Parish, has yielded four producers and has caused more than a dozen new locations to be made in that area with about ten rigs running.

Acid also has been successfully used in about 50 wells of the Caddo field, most of this type of rejuvenation of chalk wells in that field being carried on by Stanolind Oil and Gas Company.

Wildcatting has been carried on consistently throughout the year in North Louisiana particularly on the east and southeast flanks of the Sabine Uplift with a few tests drilled and a number of blocks assembled in the North Louisiana Basin between the Sabine and Monroe Uplifts. Twelve blocks were assembled and 10 tests drilled on the east flank of the Sabine Uplift with most of the drilling being done in Bienville Parish. Benedum and Trees also drilled a 5,000-foot test in Natchitoches Parish on the southeast flank of the Sabine Uplift. Geophysical surveys

were made for this test as well as for one this company drilled in Bienville Parish.

Wildcatting also definitely established the existence of a shallow interior salt dome near Minden, Webster Parish, this being discovered at approximately 1300 feet by Gulf Refining Company. Six tests were drilled in that parish on what is known as the Sibley structure, three of them by J. P. Evans, Shreveport independent operator, which proved of considerable importance for their geological data.

Altogether there were 124 wildcat tests drilled in North Louisiana last year for a total footage of 462,000 feet and at an estimated cost of $3,220,000.

North Louisiana's deepest hole was abandoned last year, R. L. Gay, Trustee's Long-Bell Lumber Company 1, Section 18-8n-13w, Sabine Parish, at total depth of 7154 feet in lower Cretaceous. This test had encountered a good oil show in oolitic lime at 4775-87 feet but casing was dropped to bottom and the well had gone ahead without a satisfactory test. It was plugged back to this horizon and the casing perforated but salt water appeared and the hole was abandoned.

Another wildcat that held considerable interest was E. T. Oakes' Johnson 1, Section 30-13n-15w, De Soto Parish, drilled to 5466 feet in oolitic lime of lower Cretaceous where about five million feet of gas showed but salt water later appeared. The anhydrite markers in the lower Cretaceous in this test were found high and its correlation with the 7154-foot test of Gay in Sabine Parish and with tests in the Rodessa field, Caddo Parish, showed it to be structurally high on these markers.

The discovery of oil production at the Claiborne-Wilcox contact at 2031 feet in Houston County, Texas, caused a revival of interest in the Urania field, La Salle Parish, Louisiana, that produces from the same contact at 1520 feet, and five new wells were drilled and completed in that field last year, all which are making some salt water along with the oil and several of which were completed with air jammers which have been widely used in this field which now has a combined daily average of 3000 barrels.

The second producer in the Glen Rose at 4400 feet was completed last year as a small pumper in old Haynesville field, Claiborne Parish, which produces from the Blossom (Ozan) at 2800 feet, and has had a successful repressuring project carried out there for the last three years in this shallow horizon.

Two other repressuring projects were started in 1934 in North Louisiana, one by Standard Oil Company of Louisiana in the northern part of the Homer field, Claiborne Parish, where one key well has been treated for the last 12 months with 50,000 cubic feet of gas daily, which recently was increased to 70,000 cubic feet, and a second key well was recently taken under treatment. The other repressuring project is one by Gulf Refining Company in the Mooringsport area of the old Caddo field, where one key well is being treated.

One small gasser that later went to salt water was completed in the lower Cretaceous at 3577 feet in the old Naborton field, De Soto Parish, which has produced oil for 15 years from the Tokio at 2700-2800 feet.

Mississippi Trend Is Toward Deeper Drilling

ELEVEN gas wells were completed in the Jackson field, location in Hinds and Rankin counties, Mississippi, during 1934 and wildcats drilled in Mississippi and other southeastern states totaled 35, all which were failures. These figures include one wildcat abandonment in southwest Tennessee, where a reported gas show at the 2200-foot level caused a flurry of drilling in the fall of the year.

Gulf Refining Company of Louisiana, which led in the development of the Jackson field, later selling its holdings there, led in the wildcatting campaign in 1934 in south Mississippi. This company has drilled a score of tests on its large holdings, that at one time aggregated approximately one million acres, the deepest of which was drilled in Stone County, Danztler Lumber Company 6, Section 22-4s-11w, reaching 7581 feet (corrected depth). A show of oil at the 3600-3700-foot level in a wildcat drilled by this company in Pearl River County, last summer, created great interest but the well was later abandoned. This company still is wildcatting in south Mississippi, at present drilling a wildcat in Harrison County.

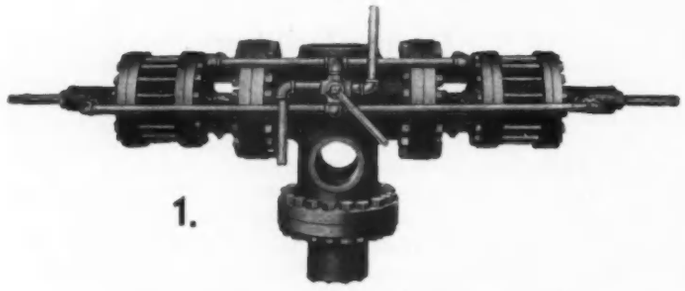
United Gas Public Service Company also has large holdings in George and Greene counties, southeast Mississippi, and in Washington County, Alabama. This company has done extensive geophysical exploration on its holdings in that area, and drilled one test last year below 7000 feet; this with the Stone County test of Gulf Refining Company made two 7,000-foot tests for Mississippi during the year. The deepest test ever drilled in the southeast was an 8002-foot hole in Covington County, south Mississippi, drilled by Eastman Gardiner et al.

There also was some wildcat leasing in the delta section in Bolivar and Issaquena counties. In the latter county, Pelican Oil and Gasoline Company and United Gas Public Service Company assembled a 40,000-acre block and have drilled to the red beds of lower Cretaceous at 3227 feet, and set casing at 3079 feet for a test of this horizon.

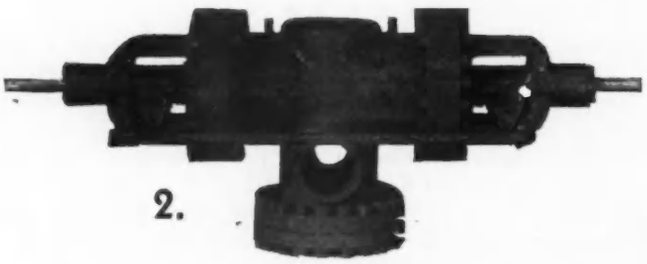
There also was a revival of activity in the Amory district, Monroe County, northeast Mississippi, where four gas wells of small capacity were completed in 1925-26. The pressure had dropped so low in these wells that new sources of gas were necessary to supply the towns of Amory, Aberdeen and Tupelo, and three tests were started in the autumn by P. J. McAlpine and associates none of which have yet been completed. A 20-mile gas line to hook up with United Gas Public Service Company's Monroe, Louisiana-Birmingham, Alabama, trunk to furnish needed gas to these towns gave Mississippi its only pipe line laid during 1934.

See Following Pages for Complete Statistical Review of 1934

FOR YOUR PROTECTION in *1935*



1.



2.

3.

4.

5.

6.

CAMERON'S Complete Preventer Line offers the following:

1. **DOUBLE PRESSURE TYPE** . . . featuring instantaneous opening and closing, operated hydraulically, by air or gas, or by steam pressure, if desired.

2. **"M-P" TYPE** . . . featuring instantaneous closing by hydraulic pressure; also air or gas. Opened by manual rotation of hand screws.

3. **FLANGED MANUAL TYPE** . . . Manually operated, rams being opened or closed by rotation of hand screws. Flanged for bolting to casing; also flanged bonnets.

4. **MANUAL OPERATED TYPE** . . . Rams opened or closed manually by rotation of hand screws. Female threaded for connecting to casing; also threaded bonnets.

5. **"M-H" (or "M-L") TYPE** . . . Primarily designed for "drilling in" and setting wells with tubing. "M-H" is 6,000 pounds test . . . "M-L" is 2,000 pounds test.

6. **TUBING CONTROL HEAD TYPE** . . . for handling tubing under pressure, providing quick and dependable means of closing well while running tubing. Rams opened and closed with ratchet levers.

See Pages 284-285 Your 1935 Composite Catalog

CAMERON

IRON WORKS, Inc.

HOUSTON, TEXAS, U. S. A.

Representatives located at
OKLAHOMA CITY, OKLA., LAFAYETTE, LA.
and MIDLAND, TEXAS
Export Office: 74 Trinity Place, New York, N. Y.

World's Production of Crude Petroleum Since 1857, by Years and Countries, in Barrels of 42 Gallons

YEAR	Rumania	United States	Italy	Canada	Russia	Poland	Japan and Formosa	Germany	India	Dutch East Indies	Peru	Mexico	Argentina	Trinidad	Egypt	Other Countries	Total	YEAR	Pct. Prod. by U.S.
1857	1,977	.....	[4]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,977	1857	.00
1858	3,560	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,560	1858	.00
1859	4,349	2,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,349	1859	31.5
1860	8,542	500,000	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	508,578	1860	98.3
1861	17,279	2,113,609	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,130,917	1861	99.1
1862	23,198	3,056,690	29	11,775	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,091,692	1862	98.8
1863	27,943	2,611,309	58	82,814	40,816	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,762,940	1863	94.5
1864	33,013	2,116,109	72	90,000	64,686	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,303,780	1864	90.5
1865	39,017	2,497,700	2,265	110,000	66,542	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,715,534	1865	91.9
1866	42,534	3,597,700	992	175,000	83,052	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,899,278	1866	92.3
1867	50,838	3,347,300	791	190,000	119,917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,708,846	1867	90.2
1868	55,369	3,646,117	367	200,000	88,327	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,990,180	1868	91.2
1869	58,533	4,215,000	144	220,000	202,308	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,695,985	1869	89.9
1870	83,765	5,260,745	86	250,000	204,618	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,799,214	1870	90.7
1871	90,030	5,205,234	273	269,397	165,129	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,730,063	1871	90.8
1872	91,251	6,293,194	131	308,100	184,391	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,877,267	1872	91.5
1873	104,036	9,893,786	467	365,052	474,379	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,837,720	1873	91.3
1874	103,177	10,926,945	604	168,807	583,751	149,837	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,933,121	1874	91.5
1875	108,569	8,787,514	813	220,000	697,364	158,522	4,566	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,977,348	1875	88.1
1876	111,314	9,132,669	2,891	312,000	1,320,528	164,157	7,708	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,051,267	1876	82.6
1877	108,569	13,350,363	2,934	312,000	1,800,720	169,792	9,560	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,753,938	1877	85.4
1878	109,300	15,396,898	4,329	312,000	2,400,960	175,420	17,884	.....	.....	.....	.....	.....	.....	.....	.....	.....	18,416,761	1878	84.7
1879	110,007	19,914,146	2,891	575,000	2,781,104	214,900	23,457	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,601,405	1879	84.3
1880	114,321	26,286,123	2,035	350,000	3,001,200	229,120	25,497	9,310	.....	.....	.....	.....	.....	.....	.....	.....	30,017,606	1880	87.5
1881	121,511	27,661,238	1,237	275,000	3,601,441	286,400	16,751	29,219	.....	.....	.....	.....	.....	.....	.....	.....	31,992,797	1881	86.4
1882	136,610	30,349,897	1,316	275,000	4,537,815	330,076	15,549	58,025	.....	.....	.....	.....	.....	.....	.....	.....	35,704,288	1882	85.0
1883	139,486	23,449,633	1,618	250,000	6,002,401	365,160	20,473	26,708	.....	.....	.....	.....	.....	.....	.....	.....	30,255,479	1883	77.5
1884	210,667	24,218,438	2,855	250,000	10,804,577	408,120	27,923	46,161	.....	.....	.....	.....	.....	.....	.....	.....	35,968,741	1884	67.3
1885	193,411	21,858,785	1,941	250,000	13,924,596	465,400	29,237	41,360	.....	.....	.....	.....	.....	.....	.....	.....	36,764,730	1885	59.4
1886	168,606	28,064,841	1,575	584,061	18,006,407	305,884	37,916	73,864	.....	.....	.....	.....	.....	.....	.....	.....	47,243,154	1886	59.4
1887	181,907	28,283,483	1,496	525,655	18,367,781	343,832	28,645	74,284	.....	.....	.....	.....	.....	.....	.....	.....	47,807,083	1887	59.2
1888	218,576	27,612,025	1,251	695,203	23,048,787	466,537	37,436	84,782	.....	.....	.....	.....	.....	.....	.....	.....	52,164,597	1888	59.9
1889	297,666	35,163,513	1,273	704,690	24,609,407	515,268	52,811	68,217	94,250	.....	.....	.....	.....	.....	.....	.....	61,507,095	1889	57.2
1890	383,227	45,823,572	2,998	795,030	28,691,218	659,012	51,420	108,296	118,065	.....	.....	.....	.....	.....	.....	.....	76,632,838	1890	59.9
1891	488,201	54,292,655	8,305	755,298	34,573,181	630,730	52,917	108,929	190,131	.....	.....	.....	.....	.....	.....	.....	91,100,347	1891	59.6
1892	593,175	50,514,657	18,321	779,753	35,774,504	646,220	68,901	101,404	242,284	.....	.....	.....	.....	.....	.....	.....	88,739,219	1892	56.9
1893	535,655	48,431,066	19,089	798,406	40,456,519	692,669	106,384	99,390	298,969	600,000	.....	.....	.....	.....	.....	.....	92,038,127	1893	52.6
1894	507,255	49,344,516	20,552	829,104	36,375,428	949,146	171,744	122,564	327,218	698,170	.....	.....	.....	.....	.....	.....	89,335,697	1894	55.2
1895	575,200	52,892,276	25,843	726,138	46,140,174	1,452,999	141,310	121,277	371,536	1,215,757	.....	.....	.....	.....	.....	.....	103,862,510	1895	51.0
1896	543,348	60,960,361	18,149	726,822	47,220,633	2,443,080	197,082	145,061	429,979	1,427,132	47,536	.....	.....	.....	.....	.....	114,159,183	1896	53.4
1897	570,886	60,475,516	13,892	709,857	54,399,568	2,226,368	218,559	165,745	545,704	2,551,649	70,831	.....	.....	.....	.....	.....	121,948,575	1897	49.5
1898	776,238	55,364,233	14,489	758,391	61,809,357	2,376,108	265,389	183,427	542,110	2,964,035	70,905	.....	.....	.....	.....	.....	124,924,682	1898	44.4
1899	1,425,777	57,070,850	16,121	808,570	65,954,968	2,313,047	536,079	192,232	940,971	1,795,961	89,166	.....	.....	.....	.....	.....	131,143,742	1899	43.5
1900	1,628,535	63,620,529	12,102	913,498	75,779,417	2,346,505	866,814	358,397	1,078,264	2,253,355	274,800	.....	.....	.....	.....	.....	149,132,116	1900	42.5
1901	1,678,320	69,389,194	16,150	756,679	85,168,556	3,251,544	1,110,790	313,630	1,430,716	4,013,710	274,800	10,345	.....	.....	.....	20,000	167,434,434	1901	41.4
1902	2,059,935	88,766,916	18,933	530,624	80,540,044	4,142,159	1,193,038	353,674	1,617,363	2,430,465	286,725	40,200	.....	.....	.....	26,000	182,006,076	1902	48.8
1903	2,763,117	100,461,337	17,876	486,637	75,591,256	5,234,475	1,209,371	445,818	2,510,259	5,770,056	278,092	75,375	.....	.....	.....	36,000	194,879,669	1903	51.5
1904	3,599,026	117,080,960	25,476	552,575	78,536,655	5,947,383	1,419,473	637,431	3,385,468	6,508,485	345,834	125,625	.....	.....	.....	40,000	218,304,391	1904	53.7
1905	4,420,987	134,717,580	44,027	634,095	54,960,270	5,765,317	1,472,804	560,963	4,137,098	7,849,896	447,880	251,250	.....	.....	.....	30,000	215,292,167	1905	62.6
1906	6,378,184	126,493,936	53,577	599,753	58,897,311	5,467,967	1,710,768	578,610	4,015,803	8,180,657	536,294	502,500	.....	.....	.....	30,000	213,415,360	1906	59.2
1907	8,118,207	166,095,335	59,875	788,872	61,850,734	8,455,841	2,001,538	756,631	4,344,162	9,982,597	756,226	1,005,000	101	.....	.....	30,000	264,245,419	1907	63.2
1908	8,252,157	178,527,355	50,966	527,987	62,186,447	12,612,295	2,070,145	1,009,278	5,047,038	10,283,357	1,011,180	2,932,900	11,472	109	.....	30,000	285,552,746	1908	62.5
1909	9,327,278	183,170,874	42,388	420,755	65,970,350	14,932,799	1,889,563	1,018,837	6,676,517	11,041,852	1,316,118	2,713,500	18,431	57,143	.....	20,000	298,616,405	1909	61.3
1910	9,723,806	209,557,248	50,830	315,895	70,336,574	12,673,688	1,930,661	1,032,522	6,137,990	11,030,620	1,330,105	3,634,080	20,753	142,857	.....	20,000	327,937,629	1910	64.0
1911	11,107,450	220,449,391	74,709	291,096	66,183,691	10,519,270	1,658,903	1,017,045	6,451,203	12,172,949	1,368,274	12,552,798	13,119	285,307	9,150	20,000	344,174,355	1911	64.0
1912	12,976,232	222,935,044	53,778	243,336	68,019,208	8,535,174	1,671,405	1,031,050	7,116,672	10,845,624	1,751,143	16,558,215	47,007	436,805	205,905	20,000	352,446,598	1912	63.9
1913	13,554,788	248,446,230	47,198	228,080	62,834,356	7,818,130	1,942,009	995,764	7,930,149	11,172,294	2,133,261	25,696,291	130,618	503,616	94,635	20,000	383,547,399	1913	64.7
1914	12,826,579	265,766,535	39,849	214,805	67,020,522	5,033,350	2,738,378	995,764	7,409,792	11,834,802	1,917,802	26,235,403	275,500	643,533	777,038	20,000	403,745,342	1914	65.8
1915	12,029,913	281,104,104	43,898	215,464	68,548,062	4,188,899	3,118,464	995,764	8,202,674	12,386,800	2,487,251	32,910,508	516,120	750,000	262,208	10,000	427,740,129	1915	65.7
1916	10,298,208	300,767,158	50,585	198,123	72,801,110	6,461,706	2,997,178	995,764	8,491,137	13,174,399	2,550,645	40,545,712	796,920	928,581	411,000	25,000	461,493,226	1916	65.2
1917	2,681,870	335,315,601	50,334	205,332	69,000,000	5,965,447	2,898,654	995,764	8,078,843	12,928,955	2,533,417	55,292,770	1,144,737	1,599,455	1,008,750	7,004,973	506,702,902	1917	66.2
1918	5,730,235	355,927,716	35,953	304,741	40,456,182	5,591,620	2,449,089	711,260	8,000,000	13,284,936	2,536,102	63,828,327	1,321,315	2,082,068	2,079,750	7,390,080	514,729,354	1918	69.1
1919	6,614,000	377,719,000	35,000	241,000	25,495,000	6,054,000	2,175,000	234,000	8,735,000	15,428,000	2,616,000	87,073,000	1,183,000	1,841,000	1,501,000	750,000	544,885,000	1919	69.0
1920	7,435,344	443,402,000	34,180	196,937	25,429,600	5,606,116	2,139,777	212,046	7,500,000	17,529,210	2,816,649	163,540,000	1,665,989	2,083,027	1,042,000	14,221,125	694,854,000	1920	63.8
1921	8,368,000	427,183,000	34,400	190,338	20,150,000	5,167,000	2,447,000	200,000	8,000,000	16,958,105	3,699,280	193,397,587	1,747,410	2,354,000	1,255,000	19,913,880	765,065,000	1921	61.7
1922	9,843,000	557,531,000	31,000	179,000	32,966,000	.....	2,042,000	319,000	7,700,000	16,720,000	5,314,000	182,278,000	3,918,000	3,445,000	1,188,000	33,235,000	854,809,000	1922	65.2
1923	10,867,000	732,407,000	34,000	170,000	39,156,000	5,373,000	1,789,000	312,000	8,320,000	19,868,000	5,699,000	149,858,000	3,400,000	3,051,000	1,054,000	37,855,000	1,019,213,000	1923	71.3
1924	13,000,000	710,463,600	.....	170,000	44,000,000	5,750,000	1,666,660	33,330	8,000,000	21,000,000	6,000,000	144,000,000	4,000,000	3,333,330	1,000,000	44,045,000	1,009,461,920	1924	70.3
1925	16,646,000	763,743,000	45,000	318,000	52,448,000	5,960,000	2,000,000	411,000	8,000,000	21,422,000	9,164,000	115,515,000	5,818,000	4,654,000	1,226,000	60,196,000	1,067,566,000	1925	71.5
1926	23,500,000	766,504,000	45,000	350,000	62,000,000	5,600,000	1,820,000	600,000	8,000,000	21,700,000	11,000,000	90,700,000	6,500,000	5,500,000	1,250,000	83,863,000	1,096,690,000	1926	69.9
1927	26,268,000	901,129,000	47,000	477,000	77,018,000	5,342,000	1,789,000	663,000	8,032,000	27,459,000	10,127,000	64,121,000	8,630,000	5,380,000	1,267,000	6,360,000	1,262,582,000	1927	71.4
1928	30,773,000	901,474,000	46,000	624,000	84,704,000	5,492,000	1,944,000	630,000	8,741,000	32,118,000	12,006,000	50,151,000	9,070,000	7,684,000	1,842,000	24,000	1,324,733,000	1928	68.0
1929	34,758,000	1,007,323,000	45,000	1,117,000	99,507,000	4,988,000	2,023,000	704,000	8,747,000	39,279,000	13,422,000	44,688,000	9,391,000	8,716,000	1,868,000	58,000	1,485,867,000	1929	67.8
1930	41,624,000	898,011,000	59,000	1,522,000	125,555,000	4,904,000	1,950,000	1,182,000	8,292,000	41,729,000	10,106,000	39,530,000	9,002,000	9,419,000	1,996,000	36,000	1,410,037,000	1930	63.7
1931	47,600,000	850,275,000	145,000	1,584,000	161,900,000	4,340,000	1,990,000	1,643,000	8,190,000	35,500,000	10,106,000	33,039,000	11,608,000	9,769,000	1,946,000	50,000	1,370,299,000	1931	62.1
1932	54,160,000	751,845,000	210,000	1,057,000	155,250,000	4,115,000	1,630,000	1,617,000	8,430,000	39,000,000	9,900,000	32,805,000	13,000,000	10,100,000	1,790,000	60,000	1,305,563,000	1932	59.9
1933	50,971,000	908,656,000	[3]	194,000	147,077,000	3,865,000	1,935,000	1,721,000	8,543,000	38,513,000	13,925,000	33,905,000	13,955,000	9,560,000	1,591,000	907,000	1,423,649,000	1933	63.6
[1]1934	60,000,000	910,051,000	[3]	240,000	166,000,000	3,600,000	2,000,000	2,100,000	8,800,000	41,800,000	14,000,000	37,000,000	14,100,000	10,900,000	1,450,000	1,600,000	1,492,041,000	[1]1934	61.0

Year	Sarawak	Sakhalin	Iraq	France	Czecho-Slovakia	Bolivia
1928	5,223,000	677,000	713,000	512,000	94,000	.....
1929	5,290,000	1,134,000	798,000	535,000	93,000	.....
1930	4,907,000	1,805,000	913,000	523,000	157,000	56,000
1931	3,689,000	2,240,000	900,000	517,000	185,000	225,000
1932	2,400,000	2,800,000	910,000	528,000	190,000	44,000
1933	2,288,000	2,500,000	1,200,000	[2]	[2]	[2] .....
1934	2,000,000	2,600,000	4,000,000	[2]	[2]	[2] .....

Year	Venezuela	Persia	Colombia	Ecuador
1927	63,134,000	39,688,000	15,002,000	537,000
1928	105,749,000	43,461,000	19,897,000	1,084,000
1929	137,472,000	42,145,000	20,385,000	1,381,000
1930	136,669,000	45,828,000	20,346,000	1,553,000
1931	118,770,000	44,300,000	18,237,000	1,751,000
1932	116,300,000	49,470,000	16,417,000	1,595,000
1933	120,882,000	49,581,000	13,157,000	1,623,000
1934	139,000,000	52,000,000	17,000,000	1,800,000

[1]Figures for foreign countries for 1934 are as reported by V. R. Garfias and R. V. Whetsel, Foreign Oil Department, Henry L. Doherty & Co., New York, with closing portion of year estimated. [2]Included under others.

Petroleum Produced in the United States, 1859-1934, in Barrels of 42 Gallons

Figures taken from Petroleum Statistics compiled by the Department of Commerce and the Bureau of Mines.

YEAR	Pennsylvania and New York	Ohio	West Virginia	California	Kentucky and Tennessee	Colorado	Indiana	Illinois	Kansas	Texas	Missouri	Oklahoma	Wyoming Includes Montana and New Mexico	Louisiana	Arkansas	United States	Total Value	YEAR
1859	2,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000	$ 32,000	1859
1860	500,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500,000	4,800,000	1860
1861	2,113,609	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,113,609	1,035,668	1861
1862	3,056,690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,056,690	3,209,525	1862
1863	2,611,309	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,611,309	8,225,663	1863
1864	2,116,109	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,116,109	20,896,576	1864
1865	2,497,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,497,700	16,459,853	1865
1866	3,597,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,597,700	30,455,398	1866
1867	3,347,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,347,300	8,066,993	1867
1868	3,646,117	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,646,117	13,217,174	1868
1869	4,215,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[4]215,000	23,730,450	1869
1870	5,260,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,260,745	20,503,754	1870
1871	5,205,234	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,205,234	22,891,180	1871
1872	6,293,194	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,293,194	21,440,503	1872
1873	9,893,786	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,983,786	18,100,464	1873
1874	10,926,945	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,926,945	12,647,527	1874
1875	8,787,514	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,787,514	7,368,133	1875
1876	8,968,906	31,763	120,000	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,132,669	22,982,822	1876
1877	13,135,475	29,888	172,000	13,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,350,363	31,788,566	1877
1878	15,163,462	38,179	180,000	15,227	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,396,868	18,044,620	1878
1879	19,685,176	29,112	180,000	19,858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,914,146	17,210,708	1879
1880	26,027,631	38,940	179,000	40,552	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26,286,123	24,600,638	1880
1881	27,376,509	33,867	151,000	99,862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,661,238	25,448,339	1881
1882	30,053,500	39,761	128,000	128,636	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30,349,897	23,631,165	1882
1883	23,128,389	47,632	126,000	142,857	4,755	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23,449,663	25,790,252	1883
1884	23,772,209	90,081	90,000	262,000	4,148	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,218,438	20,595,966	1884
1885	20,776,041	661,580	91,000	325,000	5,164	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,858,785	19,196,243	1885
1886	25,798,000	1,782,970	102,000	377,145	4,726	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,064,841	19,996,313	1886
1887	22,356,193	5,022,632	145,000	678,572	4,791	76,295	.....	.....	.....	.....	.....	.....	.....	.....	.....	28,283,483	18,877,094	1887
1888	16,488,668	10,010,888	119,448	690,333	5,096	297,612	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,612,025	17,947,620	1888
1889	21,487,435	12,471,466	544,113	303,220	5,400	316,476	33,375	1,460	500	48	20	.....	.....	.....	.....	35,163,513	26,963,340	1889
1890	28,458,208	16,124,656	492,578	307,360	6,000	368,842	63,496	900	1,200	54	278	.....	.....	.....	.....	45,823,572	35,365,105	1890
1891	33,009,236	17,740,301	2,406,218	333,600	9,000	655,482	136,634	675	1,400	54	25	30	.....	.....	.....	54,292,655	30,529,553	1891
1892	26,422,377	16,362,921	3,810,086	385,049	6,500	824,000	136,634	521	5,000	45	10	80	.....	.....	.....	50,514,657	25,906,463	1892
1893	20,314,513	16,249,769	8,445,412	470,179	3,000	594,390	2,335,293	400	18,000	50	50	10	.....	.....	.....	48,431,066	28,950,326	1893
1894	19,019,990	16,792,154	8,577,624	705,989	1,500	515,746	3,688,666	300	40,000	60	8	130	2,369	.....	.....	49,344,516	35,522,095	1894
1895	19,144,390	19,545,233	8,120,125	1,208,482	1,500	438,232	4,386,132	200	44,430	50	10	37	3,435	.....	.....	52,892,276	57,632,296	1895
1896	20,584,421	23,941,189	10,019,770	1,252,777	1,680	361,450	4,680,732	250	113,571	1,450	43	170	2,878	.....	.....	60,960,361	58,518,709	1896
1897	19,262,066	21,560,515	13,090,045	1,903,411	322	384,934	4,122,356	500	81,096	65,975	19	625	3,650	.....	.....	60,475,516	40,874,072	1897
1898	15,948,464	18,738,708	13,615,101	2,257,207	5,568	444,383	3,730,907	360	71,980	546,070	10	.....	5,475	.....	.....	55,364,233	44,193,359	1898
1899	14,374,512	21,142,108	13,910,630	2,642,095	18,280	390,278	3,848,182	360	69,700	669,013	132	.....	5,560	.....	.....	57,070,850	64,603,904	1899
1900	14,559,127	22,362,730	16,195,675	4,324,484	62,259	317,385	4,874,392	200	74,714	836,039	[1]1,602	6,472	5,450	.....	.....	63,630,529	75,989,313	1900
1901	13,831,996	21,648,083	14,177,126	8,786,330	137,259	460,520	5,757,086	250	179,151	4,393,658	[2]2,335	10,000	5,400	.....	.....	69,389,194	66,417,335	1901
1902	13,183,610	21,014,231	13,513,345	13,984,268	185,331	396,901	7,480,896	200	331,749	18,083,658	[3]757	37,100	6,253	548,617	.....	88,766,916	71,178,910	1902
1903	12,518,134	20,480,286	12,899,395	24,382,372	554,286	483,925	9,186,411	.....	932,214	17,655,572	[3]3,000	138,911	8,960	917,771	.....	100,461,337	94,694,050	1903
1904	12,239,026	18,876,631	12,644,686	29,649,434	998,284	501,763	11,339,124	.....	4,250,779	22,241,413	[2]2,572	1,366,748	11,542	2,958,958	.....	117,080,960	101,175,455	1904
1905	11,554,777	16,346,660	11,578,110	33,427,473	1,217,337	376,238	10,964,247	181,084	[2]12,013,495	28,136,189	[3]3,100	[3]	5,454	8,910,416	.....	134,717,580	34,157,399	1905
1906	11,500,410	14,787,763	10,120,935	33,098,598	1,213,548	327,582	7,673,477	4,397,050	[2]21,718,648	12,867,897	[3]3,500	[3]	[4]7,000	9,077,528	.....	126,493,936	92,444,735	1906
1907	11,211,606	12,207,448	9,095,296	39,748,375	820,844	331,851	5,128,037	24,281,973	2,409,521	12,322,696	[4]4,000	43,524,128	[4]9,339	5,000,221	.....	166,095,335	120,106,749	1907
1908	10,584,453	10,858,797	9,523,176	44,854,737	[4]727,767	379,653	3,283,629	33,686,238	1,801,781	11,206,464	[4]15,246	45,798,765	[4]17,775	5,788,874	.....	178,527,355	129,079,184	1908
1909	10,434,300	10,632,793	10,745,092	55,471,601	[4]639,016	310,861	2,296,086	30,898,339	1,263,764	9,534,457	[4]5,750	47,859,218	[4]20,056	3,059,531	.....	183,170,874	128,328,487	1909
1910	9,848,500	9,916,370	11,753,071	73,010,580	[4]468,774	239,794	2,159,725	33,143,362	1,128,668	8,899,266	[4]3,615	52,028,718	[4]115,430	6,841,395	.....	209,557,248	127,899,688	1910
1911	9,200,673	8,817,112	9,795,464	81,134,391	[4]472,458	226,926	1,695,289	31,317,038	1,278,819	9,526,474	[4]7,995	56,069,637	[4]186,695	10,720,420	.....	220,449,391	134,044,752	1911
1912	8,712,076	[4]8,969,007	12,128,962	[4]87,272,593	[4]848,368	206,052	970,009	28,601,308	1,592,796	11,735,057	([5])	51,427,071	1,572,306	9,263,439	.....	222,935,044	164,213,247	1912
1913	8,865,493	8,781,468	11,567,299	97,788,525	[4]524,568	188,568	956,095	23,893,899	2,375,029	15,009,478	[4]10,843	63,579,384	2,406,522	12,498,828	.....	248,446,230	237,121,388	1913
1914	9,109,309	8,536,352	9,680,033	99,775,327	[4]502,441	222,773	1,335,486	21,919,749	3,103,585	20,068,184	[4]7,792	73,631,724	3,560,375	14,309,435	.....	265,762,535	214,125,215	1914
1915	8,726,483	7,825,326	9,264,798	86,591,535	[4]437,274	208,475	875,758	19,041,695	2,823,487	24,942,701	[4]14,265	97,915,243	4,245,525	18,191,539	.....	281,104,104	179,462,860	1915
1916	8,466,481	7,744,511	8,731,184	90,951,930	1,203,246	197,235	769,036	17,714,235	8,738,077	27,644,605	.....	107,071,715	6,234,137	15,248,138	.....	300,767,158	330,899,868	1916
1917	8,612,885	7,750,540	8,379,285	93,877,549	3,100,356	121,231	759,432	15,776,860	36,536,125	32,413,287	.....	107,507,471	8,978,680	11,392,201	.....	[6]335,315,601	522,635,213	1917
1918	8,216,655	7,285,005	7,866,628	97,531,997	4,376,342	143,286	877,558	13,365,974	45,451,017	38,750,031	.....	103,347,070	12,596,287	16,042,600	.....	[6]355,927,716	703,943,961	1918
1919	9,441,936	8,243,592	9,032,688	101,221,784	5,027,904	241,680	929,780	12,436,000	34,769,100	85,312,000	.....	81,127,900	13,342,320	16,250,000	.....	377,719,000	887,753,379	1919
1920	8,360,400	7,412,000	8,173,050	105,668,000	8,892,600	110,000	932,000	10,772,000	38,500,000	96,000,000	.....	105,725,000	17,407,000	35,849,000	.....	443,402,000	1,360,000,000	1920
1921	8,414,000	7,333,000	8,003,000	114,709,000	8,963,000	108,200	1,163,000	10,044,000	36,232,000	103,322,000	.....	113,978,000	20,656,800	26,523,000	10,190,000	469,639,000	814,745,000	1921
1922	8,505,000	6,775,000	7,015,000	138,907,000	9,603,000	96,500	1,089,000	9,409,000	31,891,000	117,106,545	.....	147,414,000	29,177,265	33,889,480	15,869,635	556,207,725	895,111,000	1922
1923	8,590,000	7,123,000	6,452,000	258,387,119	8,110,140	95,500	1,049,000	8,724,000	29,406,925	125,991,628	.....	155,573,392	48,258,170	22,812,685	44,488,746	725,057,305	978,430,000	1923
1924	8,860,000	6,798,000	5,899,000	230,366,303	7,405,300	413,300	938,000	8,062,000	28,351,001	133,613,985	.....	170,180,463	42,480,700	20,595,136	46,480,542	710,463,430	1,024,683,000	1924
1925	9,596,000	7,226,000	5,869,000	231,768,982	6,835,700	1,123,000	830,000	7,260,000	34,497,756	150,010,406	.....	167,951,575	36,030,875	21,414,878	78,717,700	739,131,872	1,284,960,000	1925
1926	10,898,000	7,322,000	5,975,000	224,117,000	6,324,000	2,717,000	793,000	7,766,000	41,427,000	163,933,000	.....	179,272,000	33,830,000	22,803,000	59,229,000	766,504,000	1,447,760,000	1926
1927	11,768,000	7,593,000	6,023,000	231,196,000	6,779,000	2,831,000	852,000	6,994,000	41,069,000	217,389,000	.....	277,775,000	27,591,000	22,818,000	40,005,000	901,129,000	1,172,830,000	1927
1928	12,559,000	7,015,000	5,661,000	231,811,000	7,405,000	2,774,000	1,052,000	6,462,000	38,596,000	257,320,000	.....	249,857,000	26,419,000	21,847,000	32,096,000	901,474,000	1,054,880,000	1928
1929	15,197,000	6,743,000	5,574,000	292,534,000	7,794,000	2,358,000	981,000	6,319,000	42,813,000	296,876,000	.....	255,004,000	25,124,000	20,554,000	24,917,000	1,007,323,000	1,280,417,000	1929
1930	16,450,000	6,486,000	5,071,000	227,320,000	7,410,000	1,856,000	994,000	5,736,000	41,638,000	290,457,000	.....	216,486,000	31,400,000	23,272,000	19,702,000	898,011,000	1,070,200,000	1930
1931	15,255,000	5,327,000	4,472,000	[4]188,830,000	6,462,000	1,545,000	840,000	5,039,000	37,018,000	332,437,000	.....	180,574,000	32,891,000	21,804,000	14,791,000	851,081,000	550,630,000	1931
1932	15,920,000	4,644,000	3,876,000	178,128,000	6,292,000	1,136,000	806,000	4,673,000	34,848,000	312,478,000	.....	153,244,000	38,330,000	21,807,000	12,051,000	785,159,000	680,460,000	1932
1933	15,805,000	4,235,000	3,815,000	172,010,000	4,608,000	919,000	737,000	4,244,000	41,976,000	402,809,000	[4]35,000	182,251,000	27,616,000	25,168,000	11,696,000	905,556,000	608,000,000	1933
[11]1934	18,349,000	4,291,000	4,089,000	175,679,000	4,874,000	1,168,000	813,000	4,466,000	46,690,000	380,848,000	.....	180,672,000	33,814,000	32,422,000	11,176,000	910,051,000	.....	[11]1934
TOTAL	982,171,050	583,537,987	388,474,392	4,203,908,764	130,788,832	30,611,550	120,904,364	416,651,380	889,487,330	3,988,779,669	148,102,000	4,239,610,987	541,367,153	571,526,240	421,377,223	17,687,487,141	18,038,458,747	TOTAL

MICHIGAN

1925	4,000
1926	94,000
1927	439,000
1928	594,000
1929	4,528,000
1930	3,509,000
1931	3,789,000
1932	6,910,000
1933	7,942,000
1934	10,700,000
Total	38,509,000

[1]Includes Alaska, Michigan and Missouri production, estimated at 10,300 barrels in 1917 and 7,943 barrels in 1918. [2]Includes production of Michigan. [3]Includes production of Oklahoma. [4]Included with Kansas. [5]Estimated. [6]Includes production of Utah. [7]No production in Tennessee recorded. [8]Includes small production in Alaska. [9]No production in Missouri; Michigan included in Ohio. [10]Includes production of Alaska, Michigan and New Mexico. [11]Includes production of Alaska and Michigan. [12]Preliminary figures, subject to change. [13]Includes Alaska, Mississippi, Tennessee and Utah.

United States Crude Oil Production

BY STATES AND DISTRICTS

Monthly Crude Oil Production in the United States, by States, in 1934

(In Barrels of 42 U. S. Gallons)

Figures taken from "Monthly Petroleum Statement," issued by United States Bureau of Mines Department of Commerce.

	January	February	March	April	May	June	July	August	September	October	November	[1]December	The Year
Arkansas	956,000	853,000	918,000	922,000	936,000	963,000	1,016,000	946,000	894,000	927,000	871,000	974,000	11,176,000
California	14,163,000	12,594,000	14,710,000	14,473,000	15,071,000	15,467,000	16,054,000	15,292,000	14,053,000	14,454,000	14,335,000	15,013,000	175,679,000
Huntington Beach	1,195,000	1,089,000	1,244,000	1,190,000	1,292,000	1,423,000	1,455,000	1,373,000	1,187,000	1,218,000	1,177,000	1,285,000	15,128,000
Kettleman Hills	1,597,000	1,394,000	1,702,000	1,682,000	1,834,000	1,841,000	2,082,000	1,987,000	1,822,000	1,838,000	1,771,000	1,827,000	21,377,000
Long Beach	1,806,000	1,606,000	1,930,000	2,008,000	2,114,000	2,168,000	2,096,000	1,948,000	1,804,000	1,860,000	1,824,000	1,936,000	23,100,000
Santa Fe Springs	1,283,000	1,157,000	1,299,000	1,288,000	1,294,000	1,254,000	1,286,000	1,241,000	1,125,000	1,131,000	1,166,000	1,203,000	14.727,000
Rest of State	8,282,000	7,348,000	8,535,000	8,305,000	8,537,000	8,781,000	9,135,000	8,743,000	8,115,000	8,407,000	8,397,000	8,762,000	101,347,000
Colorado	87,000	83,000	81,000	86,000	98,000	88,000	109,000	116,000	110,000	103,000	105,000	102,000	1,168,000
Illinois	393,000	337,000	394,000	373,000	411,000	392,000	394,000	402,000	378,000	352,000	305,000	335,000	4,466,000
Indiana	72,000	52,000	70,000	66,000	75,000	72,000	74,000	77,000	68,000	66,000	58,000	63,000	813,000
Kansas	3,407,000	3,217,000	4,064,000	4,031,000	4,173,000	4,101,000	4,210,000	4,037,000	3,716,000	3,987,000	3,679,000	4,068,000	46,690,000
Kentucky	362,000	330,000	378,000	338,000	350,000	440,000	427,000	447,000	444,000	458,000	438,000	451,000	4,863,000
Louisiana	2,203,000	1,996,000	2,135,000	2,239,000	2,617,000	2,629,000	3,068,000	3,038,000	2,877,000	3,170,000	3,101,000	3,349,000	32,422,000
Gulf Coast	1,351,000	1,230,000	1,337,000	1,475,000	1,853,000	1,921,000	2,320,000	2,288,000	2,172,000	2,433,000	2,379,000	2,612,000	23,371,000
Rest of State	852,000	766,000	798,000	764,000	764,000	708,000	748,000	750,000	705,000	737,000	722,000	737,000	9,051,000
Michigan	822,000	813,000	870,000	901,000	1,002,000	935,000	939,000	938,000	912,000	921,000	780,000	867,000	10,700,000
Montana	222,000	207,000	214,000	237,000	276,000	292,000	341,000	413,000	377,000	414,000	398,000	406,000	3,797,000
New Mexico	1,319,000	1,186,000	1,341,000	1,401,000	1,426,000	1,418,000	1,460,000	1,533,000	1,448,000	1,457,000	1,448,000	1,458,000	16,895,000
New York	306,000	246,000	313,000	295,000	319,000	313,000	335,000	333,000	319,000	350,000	335,000	345,000	3,809,000
Ohio	358,000	281,000	365,000	345,000	394,000	362,000	357,000	370,000	336,000	387,000	359,000	377,000	4,291,000
Central and East	269,000	225,000	280,000	260,000	299,000	273,000	277,000	285,000	259,000	296,000	284,000	292,000	3,299,000
Northwestern	89,000	56,000	85,000	85,000	95,000	89,000	80,000	85,000	77,000	91,000	75,000	85,000	992,000
Oklahoma	15,218,000	13,495,000	15,451,000	15,697,000	16,474,000	16,509,000	15,609,000	14,986,000	13,861,000	14,571,000	14,050,000	14,751,000	180,672,000
Oklahoma City	5,589,000	4,600,000	5,402,000	5,803,000	6,175,000	6,084,000	5,396,000	4,821,000	4,610,000	4,785,000	4,705,000	5,050,000	63,020,000
Seminole	3,311,000	2,890,000	3,278,000	3,188,000	3,331,000	3,463,000	3,399,000	3,327,000	2,901,000	3,074,000	2,964,000	3,191,000	38,317,000
Rest of State	6,318,000	6,005,000	6,771,000	6,706,000	6,968,000	6,962,000	6,814,000	6,838,000	6,350,000	6,712,000	6,381,000	6,510,000	79,335,000
Pennsylvania	1,152,000	952,000	1,222,000	1,187,000	1,301,000	1,288,000	1,270,000	1,273,000	1,184,000	1,270,000	1,210,000	1,231,000	14,540,000
Tennessee	1,000	1,000	.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	11,000
Texas	29,686,000	27,623,000	31,673,000	31,925,000	33,443,000	33,244,000	34,271,000	33,209,000	33,384,000	32,353,000	29,567,000	30,470,000	380,848,000
Gulf Coast	4,913,000	4,484,000	4,913,000	4,809,000	5,166,000	5,011,000	5,103,000	5,416,000	5,237,000	5,060,000	4,793,000	5,294,000	60,199,000
West Texas	3,994,000	3,601,000	4,090,000	4,075,000	4,384,000	4,161,000	4,341,000	4,578,000	4,537,000	4,186,000	4,045,000	4,303,000	50,295,000
East Texas	13,989,000	13,167,000	15,514,000	15,867,000	16,280,000	16,582,000	16,822,000	15,065,000	15,706,000	15,453,000	13,360,000	13,378,000	181,183,000
Panhandle	1,326,000	1,471,000	1,671,000	1,660,000	1,770,000	1,752,000	1,857,000	1,804,000	1,736,000	1,762,000	1,699,000	1,804,000	20.312,000
Rest of State	5,464,000	4,900,000	5,485,000	5,514,000	5,843,000	5,738,000	6,148,000	6,346,000	6,168,000	5,892,000	5,670,000	5,691,000	68,859,000
West Virginia	340,000	291,000	364,000	332,000	351,000	343,000	336,000	367,000	337,000	374,000	327,000	327,000	4,089,000
Wyoming	909,000	893,000	985,000	947,000	1,152,000	1,183,000	1,277,000	1,280,000	1,111,000	1,161,000	1,096,000	1,128,000	13,122,000
Salt Creek	524,000	510,000	565,000	536,000	556,000	537,000	538,000	556,000	511,000	580,000	527,000	553,000	6,493,000
Rest of State	385,000	383,000	420,000	411,000	596,000	646,000	739,000	724,000	600,000	581,000	569,000	575,000	6,629,000
United States Total	71,976,000	65,450,000	75,548,000	75,796,000	79,870,000	80,040,000	81,548,000	79,058,000	75,810,000	76,776,000	72,463,000	75,716,000	910,051,000

[1]Estimated by The Oil Weekly, with aid of American Petroleum Institute reports.

Arkansas Crude Oil Production, by Fields, by Years

Complete Production History of State, in Barrels of 42 U. S. Gallons

(Figures through 1930 from *Mineral Resources*, published by the Bureau of Mines, Department of Commerce. Later figures, beginning with 1931, from weekly reports of American Petroleum Institute.)

YEAR	Bradley	Champagnolle	El Dorado	Irma-Nevada	Lisbon	Mount Holly	Smackover	Stephens	Urbana	Others	Total Arkansas
1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	a
1921	.....	.....	10,473,000	.....	.....	.....	.....	.....	.....	.....	10,473,000
1922	.....	.....	10,592,000	.....	.....	.....	2,107,000	13,000	.....	.....	12,712,000
1923	.....	.....	5,830,000	b	.....	.....	30,048,000	b732,000	.....	.....	36.610,000
1924	.....	.....	4,760,000	450,000	.....	.....	40,000,000	818,000	.....	.....	46,028,000
1925	.....	.....	4,247,000	334,000	.....	.....	72,144,000	673,000	.....	.....	77,398,000
1926	52,000	.....	2,722,000	763,000	2,125,000	.....	52,063,000	607,000	.....	.....	58,332,000
1927	44,000	c	c2,433,000	774,000	1,054,000	.....	35,201,000	499,000	.....	.....	40,005,000
1928	31,000	3,522,000	2,456,000	536,000	566,000	.....	24,569,000	416,000	.....	.....	32,096,000
1929	24,000	2,651,000	1,987,000	409,000	492,000	d	d18,991,000	363,000	.....	.....	24,917,000
1930	19,000	1,486,000	1,424,000	380,000	399,000	34,000	15,405,000	319,000	236,000	.....	19,702,000
1931	.....	1,030,800	1,265,750	390,050	241,050	.....	11,959,800	273,400	.....	361,700	15,522,550
1932	.....	653,600	1,100,550	389,550	181,000	.....	9,630,400	188,150	.....	239,250	12,382,500
1933	.....	498,650	954,150	231,550	148,800	.....	8,907,000	144,500	.....	589,750	11,474,400
1934	.....	516,300	886,200	298,850	135,050	.....	8,055,450	225,950	.....	1,294,300	11,412,100
Totals	170,000	10,358,350	51,130,650	4,956,000	5,341,900	34,000	329,080,650	5,272,000	236,000	2,485,000	409,064,550

a—Small production only, being first for state. b—Irma included with Stephens. c—Champagnolle included with El Dorado. d—Mount Holly included with Smackover.

Wyoming Crude Oil Production, by Districts, by Years

Complete Production History of State, in Barrels of 42 U. S. Gallons

(Figures through 1930 from "Mineral Resources of the United States," published by the Bureau of Mines, Department of Commerce. Beginning 1931, figures are from American Petroleum Institute weekly reports.)

YEAR	Big Muddy	Byron-Greybull Torchlight	Elk Basin	Ferris	Grass Creek	Hamilton Dome-Worm Springs	La Barge	Lance Creek	Lander Dallas-Derby Dome	Lost Soldier	Mule Creek
1894											
1895											
1896											
1897											
1898											
1899											
1900											
1901											
1902											
1903											
1904											
1905											
1906											
1907											
1908											
1909											
1910											
1911											
1912											
1913											
1914		96,000							27,000		
1915	a	141,000			99,000				28,000		
1916	a	140,000	721,000		1,370,000				b63,000		
1917	665,000	62,000	1,530,000		2,756,000				b50,000		
1918	3,082,000	45,000	1,067,000		2,951,000				48,000		
1919	3,104,000	27,000	740,000	c	3,049,000			461,000	62,000	c167,000	
1920	2,083,000	69,000	732,000	c	1,573,000	57,000		353,000	84,000	c135,000	183,000
1921	1,927,000	80,000	681,000	c	1,435,000	67,000		346,000	119,000	c524,000	68,000
1922	1,506,000	70,000	652,000	c	1,784,000	111,000		282,000	149,000	c751,000	168,000
1923	1,527,000	57,000	634,000	c	1,589,000	216,000		363,000	137,000	c1,551,000	
1924	1,272,000	33,000	409,000	42,000	1,113,000	239,000		786,000	133,000	1,733,000	178,000
1925	1,223,000	30,000	314,000	33,000	1,240,000	264,000		360,000	152,000	1,713,000	129,000
1926	1,215,000	a	273,000	c	1,025,000	319,000	70,000	540,000	165,000	c2,059,000	
1927	1,072,000	28,000	337,000	c	974,000	313,000	341,000	269,000	246,000	c1,341,000	188,000
1928	963,000	25,000	360,000	c	871,000	298,000	490,000	217,000	247,000	c1,442,000	142,000
1929	802,000	26,000	265,000	c	778,000	355,000	805,000	87,000	209,000	c1,311,000	141,000
1930	711,000	49,000	264,000	c	729,000	300,090	747,000	60,000	252,000	d1,271,000	29,000
1931	683,950		240,600		755,950		462,300	96,300		1,325,750	
1932	618,000		183,750		780,300		341,750	38,350		875,650	
1933	662,500		201,450		268,400		353,750	58,250		646,250	
1934	642,050		199,800		344,200		449,100	113,500		568,800	
Totals	23,757,500	978,000	9,804,600	c75,000	24,484,850	2,539,000	4,059,900	4,430,400	2,171,000	17,414,450	1,225,000

Wyoming Crude Oil Production, by Districts, by Years (Continued)

YEAR	Notches	Oregon Basin	Osage	Pilot Butte	Poison Spider So. Casper	Rex Lake	Rock Creek	Salt Creek	Teapot	Unclassified	Others	Wyoming Total
1894										2,000		2,000
1895										3,000		3,000
1896										3,000		3,000
1897										4,000		4,000
1898										5,000		5,000
1899										6,000		6,000
1900										5,000		5,000
1901										5,000		5,000
1902										6,000		6,000
1903										9,000		9,000
1904										12,000		12,000
1905										8,000		8,000
1906										7,000		7,000
1907										9,000		9,000
1908										18,000		18,000
1909										20,000		20,000
1910										115,000		115,000
1911										187,000		187,000
1912										1,572,000		1,572,000
1913										2,407,000		2,407,000
1914								3,421,000			16,000	3,560,000
1915								5,971,000			7,900	4,246,000
1916				b				3,933,000			7,000	6,234,000
1917				b				3,911,000			4,000	8,978,000
1918				62,000				5,337,000			4,000	12,596,000
1919				91,000			242,000	6,225,000			4,000	13,172,000
1920			16,000	60,000			1,370,000	10,090,000			18,000	16,831,000
1921			176,000	46,000			1,681,000	12,172,000			11,000	19,333,000
1922			182,000	38,000			1,728,000	19,248,000	37,000		9,000	26,715,000
1923	61,000		178,000	29,000	a		1,429,000	35,770,000	1,156,000		88,000	44,785,000
1924	39,000		146,000	29,000	229,000	41,000	1,181,000	30,874,000	1,004,000		17,000	39,498,000
1925	35,000		109,000	25,000	297,000	20,000	1,087,000	21,445,000	632,000		65,000	29,173,000
1926	34,000		113,000	20,000	e376,000	53,000	1,029,000	18,010,000	426,000		49,000	25,776,000
1927	24,000		107,000	17,000	247,000	44,000	982,000	14,399,000	314,000		64,000	21,307,000
1928		882,000	133,000	19,000	327,000	18,000	928,000	14,023,000			77,000	21,461,000
1929		1,540,000	166,000	18,000	f446,000	36,000	842,000	11,377,000			110,000	19,314,000
1930		1,285,000	385,000	16,000	f323,000	6,000	770,000	g10,531,000			140,000	17,868,000
1931		499,450					694,800	8,722,550			1,330,300	14,811,950
1932		107,350					486,800	7,710,050			1,703,500	12,845,500
1933		200,800					469,250	6,859,650			1,257,700	10,978,000
1934		681,950					558,650	6,612,650			2,200,400	12,371,100
Totals	193,000	5,196,550	1,711,000	479,000	2,245,000	218,000	15,478,500	254,641,900	3,569,000	4,403,000	7,181,900	386,256,550

a—Included under others. b—Pilot Butte included with Lander-Dallas. c—Ferris included with Lost Soldier. d—Includes Ferris and Tensleep. e—Includes Iron Creek and Simpson Ridge. f—Includes Simpson Ridge. g—Includes 11,000 barrels from East Teapot dome.

REED

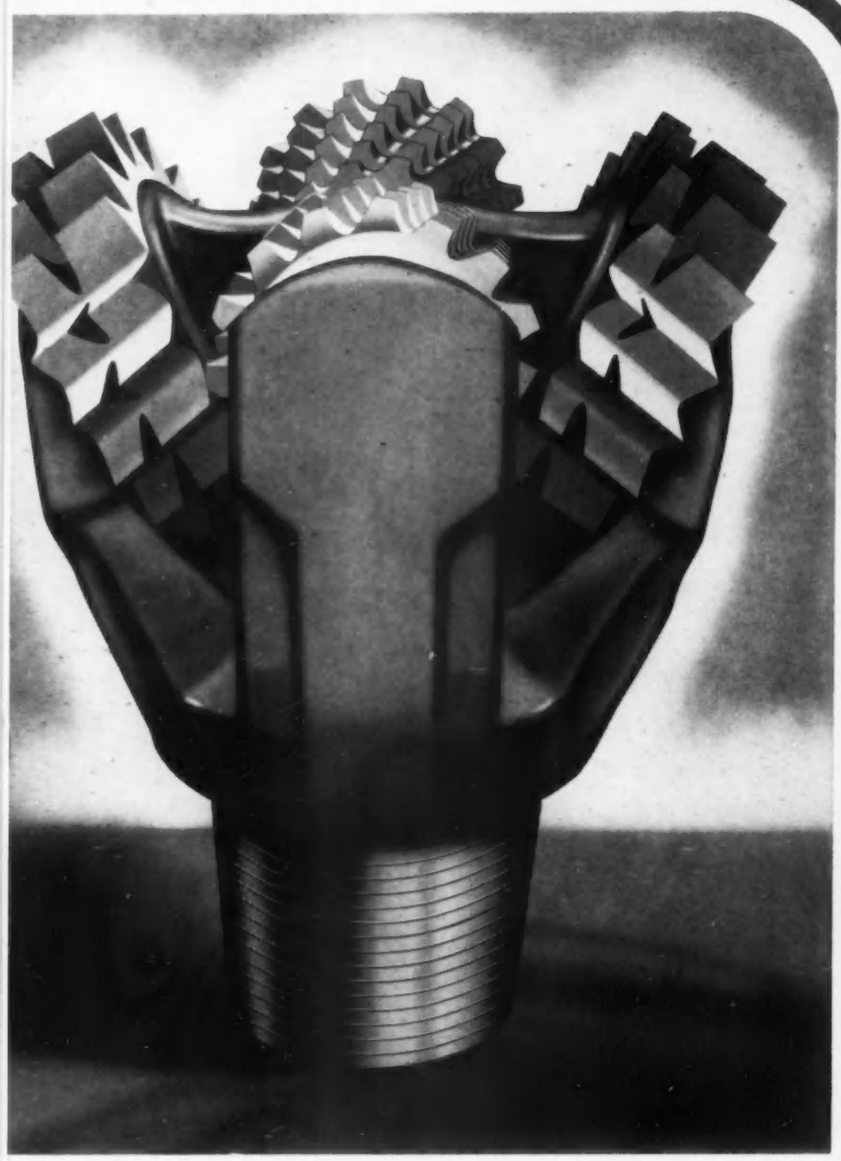
FULL HOLE TOOL JOINTS

ADVANTAGES

ADOPTED
A. P. I.
STANDARD

1. Increased drilling speeds.
2. Increased drilling bit efficiencies.
3. Lowered mud pump upkeep costs.
4. Freer mud circulation aids in keeping long drill stems from getting stuck.
5. Lowered fishing hazards.
6. Facilitates running of surveying instruments and wire line core drills.

THE NEW STANDARD OF THE INDUSTRY.



REED
Roller Bearing
ROCK BITS

SPEEDY for STRAIGHT HOLE DRILLING

With Light Drilling Weights

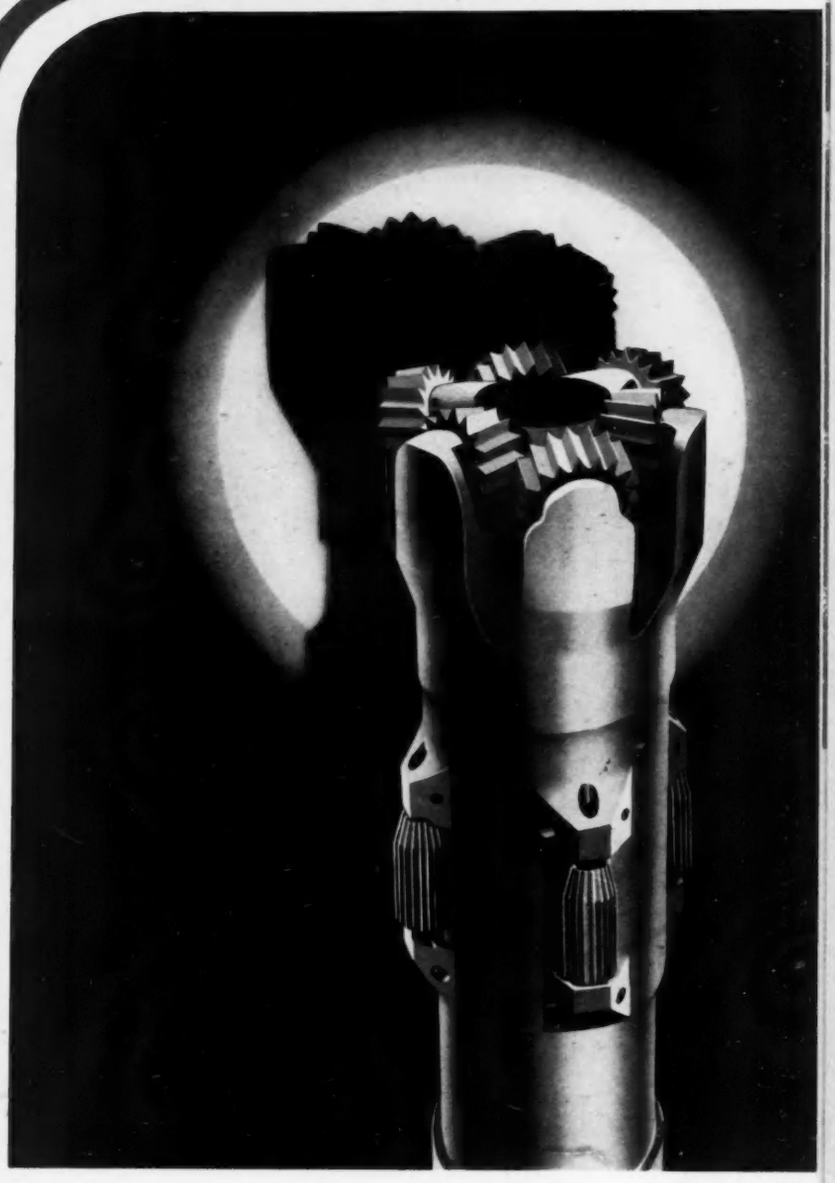
RUGGED for HARD DRILLING

With Heavy Drilling Weights

SAVE MANY DRILLING DAYS

REED
Model "B"
CORE DRILLS

★ LARGER
LONGER
CORES



FOR LARGER, LONGER CORES . . . RUN

REED MODEL B
IMPROVED
CORE DRILLS

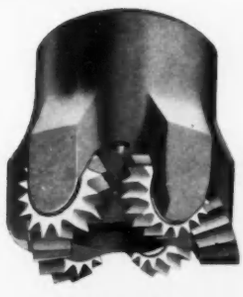
The result of

Core Drill Development and Manufacturing Experience

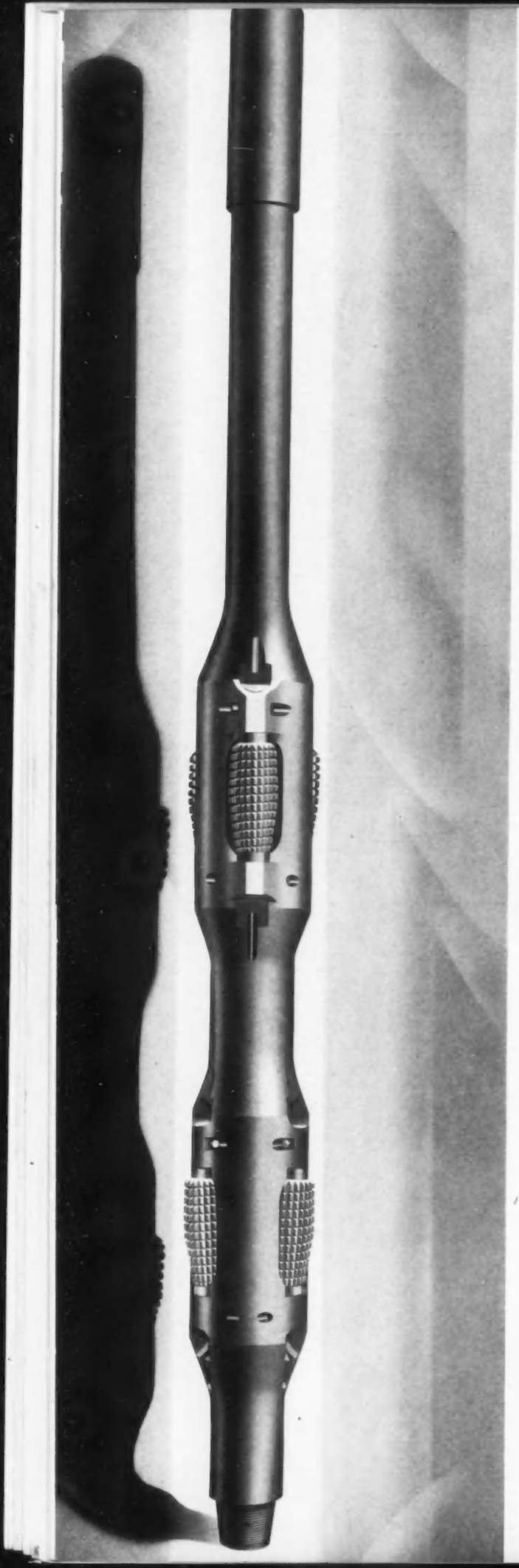
A Simplified Construction
for
SAFETY and ECONOMY

Soft Formation Cutter Heads and Hard Formation Cutter Heads are Interchangeable

Soft Formation Cutter Head



Hard Formation Cutter Head



Drill STRAIGHT HOLES

with

REED REAMERS

&

STRAIGHT HOLES cost less

Type 34
6-CONTACT REAMER

Upper and Lower Cutters Tapered.

For trimming hole to gauge in broken formations.

Type 35
3-CONTACT REAMER

Cutters Tapered.

Generally used immediately above the drilling bit for holding the bit in true alignment and trimming the walls of the hole to full round gauge.

REED ROLLER BIT CO.

MAIN PLANT: HOUSTON, TEXAS, U. S. A. P. O. BOX 2119

Export Office: NEW YORK, N. Y., 30 Rockefeller Plaza
London Representative's Office: LONDON, E. C. 2, COVENTRY HOUSE, South Place

Branches at

LOS ANGELES, CALIF. 1317 Esperanza St.
KILGORE, TEXAS
LAKE CHARLES, LA.
OKLAHOMA CITY, OKLA. 1129 Southeast 29th St.

Distributed Through Supply Stores Everywhere
Mid-Continent and Gulf Coast Distributors for MARTIN-DECKER PRODUCTS

[1]California Crude Oil Production, by Fields, by Years

Complete Production History of State, in Barrels of 42 U. S. Gallons

(Sources.—Data furnished by state and federal bureaus, the Independent Oil Producers' Agency, and the American Petroleum Institute.)

YEAR	Kern River	Mt. Poso	Round Mountain	Fruitvale	McKittrick	Midway	Sunset	Elk Hills	Lost Hills-Belridge	Coalinga	Kettleman North Dome	Wheeler Ridge	Santa Maria-Lompoc	Summerland
Prior	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1876	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,800
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,904
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,119	.....	.....	.....	39,792
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	70,140	.....	.....	.....	130,136
1898	.....	.....	.....	.....	10,000	.....	.....	.....	.....	154,000	.....	.....	.....	132,217
1899	.....	.....	.....	.....	15,000	.....	.....	.....	.....	439,372	.....	.....	.....	208,370
1900	826,775	.....	.....	.....	80,000	.....	12,500	.....	.....	547,960	.....	.....	.....	183,486
1901	3,278,840	.....	.....	.....	430,450	4,235	188,600	.....	.....	525,433	.....	.....	.....	203,616
1902	8,988,046	.....	.....	.....	619,296	3,048	167,558	.....	.....	571,233	.....	.....	94,188	136,252
1903	16,342,099	.....	.....	.....	1,353,206	27,305	352,565	.....	.....	2,138,058	.....	.....	204,890	131,125
1904	17,226,240	.....	.....	.....	1,856,225	910	390,425	.....	.....	5,097,853	.....	.....	700,450	120,506
1905	15,253,845	.....	.....	.....	1,373,030	18,530	419,212	.....	.....	8,882,125	.....	.....	3,402,800	96,871
1906	12,825,166	.....	.....	.....	680,756	11,800	307,550	.....	.....	8,401,105	.....	.....	4,799,411	72,810
1907	12,346,014	.....	.....	.....	2,415,840	149,944	704,805	.....	.....	8,996,268	.....	.....	8,249,236	69,060
1908	13,803,579	.....	.....	.....	3,076,300	434,578	1,463,510	.....	.....	10,725,795	.....	.....	8,699,350	67,862
1909	14,508,242	.....	.....	.....	5,807,360	2,234,455	1,999,701	.....	.....	15,406,619	.....	.....	8,017,455	66,338
1910	14,776,435	.....	.....	.....	5,471,613	11,174,207	9,218,904	.....	4,900	18,646,570	.....	.....	7,607,830	74,725
1911	14,078,890	.....	.....	.....	5,477,532	21,584,602	5,559,069	.....	168,410	18,311,251	.....	.....	7,465,074	71,255
1912	12,446,445	.....	.....	.....	5,094,465	25,948,980	5,590,824	.....	2,680,961	19,546,122	.....	.....	6,801,966	65,715
1913	9,980,940	.....	.....	.....	4,496,842	33,040,129	5,984,651	.....	5,274,553	18,604,626	.....	.....	5,817,711	62,406
1914	7,030,545	.....	.....	.....	3,820,857	37,479,228	12,546,615	.....	4,830,921	15,925,887	.....	.....	4,303,080	55,743
1915	8,034,974	.....	.....	.....	3,552,801	33,311,486	6,006,607	.....	4,318,550	13,548,159	.....	.....	4,536,840	53,000
1916	8,402,525	.....	.....	.....	3,230,644	32,156,818	6,768,658	.....	4,852,431	14,381,493	.....	.....	4,422,410	56,775
1917	8,495,610	.....	.....	.....	3,252,544	29,487,812	7,072,333	.....	6,295,329	15,938,543	.....	.....	5,798,070	56,570
1918	7,921,515	.....	.....	.....	3,050,627	27,439,993	6,608,940	.....	5,420,079	16,283,066	.....	.....	7,143,750	54,613
1919	7,563,025	.....	.....	.....	2,810,848	26,133,048	5,589,885	281,019	4,554,821	16,385,610	.....	.....	6,030,910	53,680
1920	7,456,515	.....	.....	.....	2,607,240	25,217,420	5,423,781	7,275,809	4,139,767	15,464,198	.....	.....	5,928,060	54,910
1921	6,715,680	.....	.....	.....	2,056,101	24,172,350	4,613,965	18,085,425	3,261,281	12,340,637	.....	.....	5,563,324	54,155
1922	7,317,288	.....	.....	.....	2,417,434	24,152,026	5,542,816	11,891,030	2,814,824	9,159,368	.....	.....	3,797,903	48,339
1923	6,816,134	.....	.....	.....	2,191,702	27,803,281		8,174,371	1,843,483	5,210,839	.....	128,674	3,003,672	52,862
1924	6,773,321	.....	.....	.....	2,094,598	37,464,889		13,589,611	1,526,371	10,144,428	.....	342,357	2,857,495	53,201
1925	5,901,877	.....	.....	.....	2,091,971	36,923,402		11,971,149	1,730,140	7,751,107	.....	344,760	2,596,581	48,351
1926	4,358,396	.....	.....	.....	1,961,028	33,968,755		12,292,754	1,693,666	7,295,807	.....	371,981	1,852,356	46,865
1927	6,098,582	40,277	8,700	.....	1,855,603	31,670,708		10,073,073	1,515,300	7,154,599	.....	374,734	1,999,051	49,475
1928	5,071,284	53,977	44,455	133,433	1,805,485	27,314,093		8,107,198	1,526,491	4,655,284	199,699	329,485	2,041,499	44,853
1929	6,089,344	1,826,056	223,734	594,498	1,708,520	25,310,976		6,353,035	1,602,425	3,558,843	1,951,786	250,156	1,535,815	93,826
1930	5,349,915	3,883,924	1,194,832	903,337	1,489,628	23,487,147		6,572,379	1,313,475	3,373,078	6,209,357	219,237	1,152,893	118,042
1931	3,857,474	3,009,374	245,426	867,719	903,722	18,728,461		4,925,636	2,983,749	2,978,392	17,544,824	192,897	1,015,205	59,115
1932	3,387,262	2,907,839	928,814	1,600,801	651,792	17,929,036		4,537,461	3,329,984	3,649,578	21,949,072	187,299	1,080,723	39,386
1933	3,210,010	3,050,826	1,118,913	1,672,805	651,361	17,541,812		4,487,978	3,205,873	4,423,512	21,472,041	168,918	1,254,818	31,434
1934	3,727,513	3,455,933	1,823,810	1,348,413	1,100,229	19,729,757		3,354,616	4,374,298	6,644,817	21,264,839	156,512	1,814,075	20,765
Totals	296,260,345	18,228,206	5,588,684	7,121,006	83,562,650	764,588,695		131,972,544	75,262,082	333,345,894	90,591,618	3,067,010	131,588,891	3,097,206

Figures for MIDWAY and SUNSET fields are combined after 1922

[1]For 1934, actual production for first 11 months; estimated for December. [2]Edison.

[1]California Crude Oil Production, by Fields, by Years—Continued

Complete Production History of State, in Barrels of 42 U. S. Gallons

(Sources.—Data furnished by state and federal bureaus, the Independent Oil Producers' Agency, and the American Petroleum Institute.)

YEAR	Elwood Goleta	Rincon	Ventura Avenue	Ventura Co. and Newhall	Los Angeles and Salt Lake	Whittier	Fullerton (Brea Olinda)	Coyote	Santa Fe Springs	Montebello	Richfield	Huntington Beach	Long Beach	Torrance
Prior	.....	.....	.....	175,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1876	.....	.....	.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1877	.....	.....	.....	13,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1878	.....	.....	.....	15,227	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1879	.....	.....	.....	19,858	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1880	.....	.....	.....	40,552	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1881	.....	.....	.....	99,862	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	128,636	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	142,857	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	262,000	.....	.....	Early production included under Newhall and Ventura County	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	325,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	377,145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	.....	.....	.....	678,572	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	.....	.....	.....	690,333	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	303,220	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	307,360	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	.....	.....	.....	323,600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	385,049	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	470,179	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	570,469	196,094	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	474,624	749,695	.....	.....	.....	.....	.....	.....	.....	.....	.....
1896	.....	.....	.....	298,866	902,868	.....	.....	.....	.....	.....	.....	.....	.....	.....
1897	.....	.....	.....	631,135	1,064,158	.....	12,000	.....	.....	.....	.....	.....	.....	.....
1898	.....	.....	.....	763,871	1,126,000	.....	60,000	.....	.....	.....	.....	.....	.....	.....
1899	.....	.....	.....	743,998	1,052,036	.....	217,599	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	.....	628,734	1,280,000	.....	511,550	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	495,943	1,830,000	.....	753,198	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	646,496	2,027,000	.....	1,103,793	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	682,185	793,765	.....	2,305,613	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	650,779	1,241,304	.....	2,224,550	.....	.....	.....	.....	.....	.....	.....
1905	.....	.....	.....	476,898	2,226,768	.....	2,118,312	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	404,379	2,675,650	.....	2,434,512	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	435,584	3,372,465	.....	3,294,206	.....	.....	.....	.....	.....	.....	.....
1908	.....	.....	.....	498,015	5,138,959	.....	4,273,314	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	Early production included under Newhall and Ventura County	516,628	4,350,898	.....	5,157,252	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	652,575	3,729,618	.....	6,281,221	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	661,785	3,223,661	.....	7,081,165	.....	.....	.....	.....	.....	.....	.....
1912	.....	.....	.....	859,885	3,073,427	747,439	5,813,037	1,359,303	.....	.....	.....	.....	.....	.....
1913	.....	.....	.....	1,022,052	2,898,846	690,133	6,189,561	3,777,359	.....	.....	.....	.....	.....	.....
1914	.....	.....	.....	968,421	2,504,475	636,789	6,495,100	6,998,659	.....	.....	.....	.....	.....	.....
1915	.....	.....	.....	1,036,305	2,110,133	758,163	5,661,878	6,610,508	.....	.....	.....	.....	.....	.....
1916	.....	.....	.....	1,122,033	1,721,453	1,014,667	5,076,306	8,588,699	.....	.....	.....	.....	.....	.....
1917	.....	.....	.....	1,186,407	1,501,799	1,156,752	4,750,582	11,458,471	.....	789,635	.....	.....	.....	.....
1918	.....	.....	.....	1,386,518	1,397,781	1,046,467	4,403,281	12,614,598	.....	6,839,267	.....	.....	.....	.....
1919	.....	.....	.....	1,792,465	1,341,415	1,001,048	4,350,084	10,240,359	.....	12,100,784	965,408	.....	.....	.....
1920	.....	.....	.....	2,122,449	1,311,264	842,184	5,391,497	8,732,435	.....	11,124,585	2,565,346	38,116	.....	.....
1921	.....	.....	.....	2,375,479	1,344,926	735,376	6,012,839	7,419,050	208,216	9,065,723	8,206,962	2,518,812	75,588	.....
1922	.....	.....	.....	3,015,877	1,258,287	717,729	4,512,974	7,000,373	11,032,955	6,692,024	8,314,528	11,169,383	18,560,595	190,785
1923	.....	.....	.....	3,702,404	1,192,036	645,219	4,064,661	2,447,825	79,781,275	4,075,669	6,121,335	34,355,642	68,810,361	3,128,694
1924	.....	.....	.....	4,020,169	907,453	761,211	4,120,789	5,683,559	26,399,655	6,230,299	4,457,679	17,533,520	60,122,002	17,526,123
1925	.....	.....	.....	9,263,472	731,912	742,676	4,481,443	7,140,004	18,969,528	6,843,194	4,318,488	15,887,474	40,173,375	13,242,113
1926	.....	.....	14,795,495	2,204,381	675,950	746,125	6,987,489	6,030,619	17,446,709	6,515,493	5,574,244	19,064,814	37,931,964	10,354,905
1927	86,840	5,923	17,808,704	2,197,644	630,600	660,505	7,008,934	5,146,864	15,153,578	5,498,252	7,884,042	26,344,697	34,541,667	8,338,938
1928	895,152	1,082,735	18,920,942	2,096,343	560,607	612,126	5,743,044	4,901,998	16,093,931	4,369,638	6,798,673	19,642,278	62,467,103	6,454,067
1929	9,435,819	1,192,237	20,934,388	1,856,706	552,614	563,790	4,813,942	4,176,035	76,477,464	3,657,922	5,776,258	16,007,030	60,495,555	5,000,218
1930	14,606,007	1,003,204	17,493,155	1,772,131	545,959	516,802	4,423,266	3,890,047	44,251,396	2,712,725	3,643,578	11,108,203	36,599,688	4,116,846
1931	10,470,056	710,178	15,255,256	1,325,625	464,564	474,261	3,626,008	3,751,857	24,272,660	2,446,052	2,433,186	7,778,549	30,166,409	2,191,781
1932	5,441,626	628,179	12,332,853	1,259,755	394,124	399,540	3,018,125	3,716,467	22,538,036	2,162,530	2,263,699	8,016,001	27,435,553	2,281,274
1933	4,918,488	680,471	12,576,208	1,199,997	313,810	404,128	2,964,674	3,698,372	18,271,807	1,933,121	2,467,913	13,091,926	24,798,242	2,362,719
1934	4,108,496	543,548	9,881,152	1,402,098	289,300	394,725	3,753,941	4,146,241	14,726,910	1,979,520	2,931,281	15,129,286	23,101,099	2,529,748
Totals	49,962,484	5,846,475	139,998,153	64,191,030	64,703,674	16,267,855	151,491,740	139,529,702	385,624,120	95,036,433	74,722,620	217,685,731	525,279,201	77,718,211

[1]For 1934, actual production for first 11 months; estimated for December. [2]Edison.

WHAT *is* THE HESSELMAN ENGINE?

The Hesselman is a solid injection, spark ignition engine burning Diesel fuel oils. It was invented and developed by one of Europe's three leading Diesel engineers, Mr. K. J. E. Hesselman, most of whose professional lifetime has been spent in the improvement of the conventional high pressure Diesel.

Waukesha-Hesselman Engines are not offered as a substitute for compression ignition Diesel engines, but rather as supplementary. It is an engine that expands the economic application of fuel oil power and that will fit into many places where a Diesel cannot be economically applied.

After thirty years' specialized experience, Waukesha engineers are building engines for every fuel—each the most economical in its class. This knowledge enables them to recommend without prejudice the engine best suited to the particular duty.

The Waukesha-Hesselman is recommended for industrial tractors, electric lighting and power plants, road building, logging, oil field, and contractors' machinery, marine propulsion, etc. *Write* for Bulletin 1000. *Waukesha Motor Company, Waukesha, Wisconsin.*

THIS IS NO. 1 OF A SERIES ON THE WAUKESHA-HESSELMAN OIL ENGINE
No. 2 will appear next month. A reprint of the complete series will be mailed on request

WAUKESHA ENGINES

[1]California Crude Oil Production, by Fields, by Years—Continued

Complete Production History of State, in Barrels of 42 U. S. Gallons

(Sources.—Data furnished by state and federal bureaus, the Independent Oil Producers' Agency, and the American Petroleum Institute.)

YEAR	Dominguez	Rosecrans	Inglewood	Seal Beach	Potrero	Playa del Rey	Capitan	Santa Barbara	Watsonville	Newport	Lawndale	San Miguelito	Kettleman Middle Dome	Mountain View	Miscellaneous	TOTAL
Prior	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	175,000
1876	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,000
1877	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,000
1878	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,227
1879	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,858
1880	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40,552
1881	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99,862
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128,636
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	142,857
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	262,000
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	325,000
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	377,145
1887	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	678,572
1888	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	690,333
1889	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	303,220
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	307,360
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	323,600
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	385,049
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	470,179
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,715	783,078
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,116	1,245,339
1896	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,135	1,257,780
1897	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,000	1,911,569
1898	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,000	2,249,088
1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,500	2,677,875
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	248,945	4,319,950
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,710,315
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,356,910
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,670	24,334,481
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39,392	29,548,634
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29,650	34,298,041
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,090	32,623,229
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69,090	40,102,512
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	125,475	48,306,737
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	126,775	58,191,723
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58,970	77,697,568
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61,350	83,744,044
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45,870	90,074,439
1913	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	97,867,184
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	103,623,695
1915	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	89,566,779
1916	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,450	91,822,362
1917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	97,267,832
1918	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	101,637,870
1919	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,375	101,221,784
1920	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,610	105,721,186
1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,035	114,849,924
1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20,338	139,626,876
1923	157,698	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,058	263,728,895
1924	6,811,531	611,432	10,445	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20,979	230,063,117
1925	13,328,817	7,263,466	18,348,395	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53,647	230,147,342
1926	7,801,586	6,114,430	17,390,131	587,107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53,963	224,117,013
1927	5,887,645	3,506,116	12,751,556	16,424,929	571	.....	.....	.....	.....	.....	.....	.....	.....	.....	33,356	230,751,463
1928	4,267,009	2,392,325	10,762,797	12,436,371	107,380	.....	.....	.....	.....	.....	.....	.....	.....	.....	50,842	231,982,597
1929	3,606,850	2,463,808	8,768,101	14,418,305	271,446	25,121	.....	.....	.....	.....	.....	.....	.....	.....	444,288	292,036,911
1930	3,694,075	2,435,341	6,429,205	8,026,796	638,268	4,719,981	25,295	12,851	22,764	14,600	130,472	.....	.....	.....	.....	228,099,899
1931	4,183,052	1,344,452	5,289,125	4,882,115	353,160	9,759,018	53,183	110,880	22,795	6,897	121,670	24,249	.....	.....	.....	188,829,032
1932	6,823,579	1,125,624	4,869,335	4,522,489	252,609	5,910,926	3,092	156,446	22,824	927	110,350	252,247	10,537	.....	.....	178,127,794
1933	6,626,605	1,080,247	4,059,973	3,991,901	141,791	4,059,240	24,621	249,426	21,999	.....	79,460	390,559	151,979	233,341	.....	173,083,319
1934	6,652,776	1,040,392	3,380,997	3,515,242	150,340	3,195,240	191,757	607,231	22,040	.....	53,738	268,225	131,332	2,615,360	[2]120,770	175,678,362
Totals	69,841,223	29,377,633	92,060,060	68,805,255	1,915,565	27,669,526	297,948	1,136,834	112,422	22,424	495,690	935,280	293,848	2,848,701	1,909,329	4,250,053,998

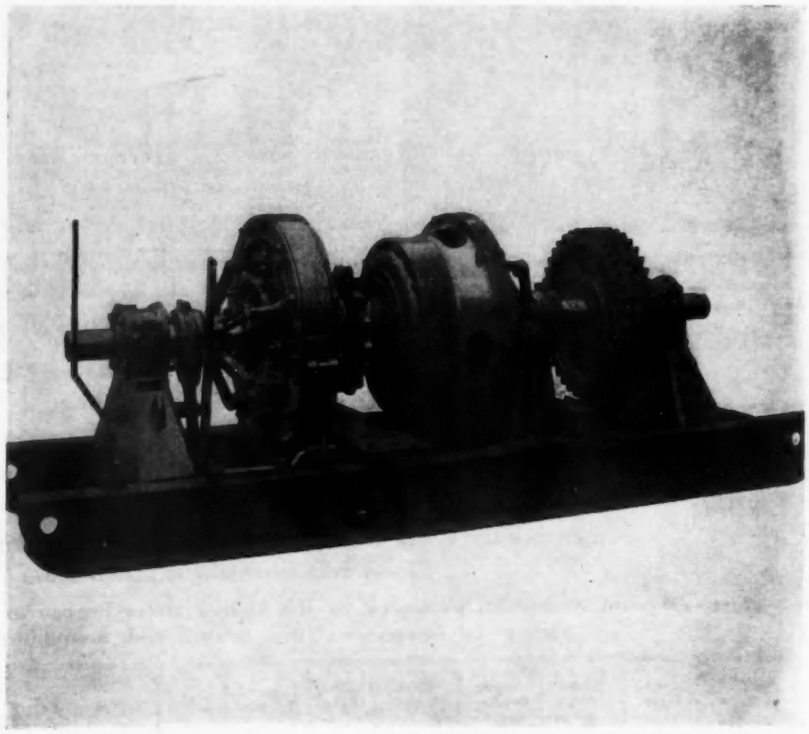
[1]For 1934, actual production for first 11 months; estimated for December. [2]Edison.

SKF—*The Logical Bearing*

FOR BIG JOBS

In the Oil Industry

● SKF makes practically *all types of anti-friction bearings.* When SKF recommends a particular type of bearing, therefore, you may depend upon it; its recommendations are *unbiased!*



SKF-EQUIPPED BUILT BY LUCEY PRODUCTS CORP.

It is significant that Lucey has found SKF the logical bearing for shaft speed of 250 r. p. m. . . maximum clutch capacity (at 100 r. p. m.) of 480 h. p. on end locations of this Reverse Clutch Countershaft.

SKF Spherical Roller Bearings perform even beyond the fondest expectations of engineers who specified them for this application . . . and they never hold up production by quitting. They are built for hard work. They have self-contained alignment . . . carry thrust in either direction . . . and shoulder heavy loads for long periods without ever needing adjustment. Their sealed housings defy dirt and moisture . . . hold lubricant for months at a time. And more than ever before, you'll find that it costs more to replace a poor bearing than to buy the best that SKF has ever produced. SKF INDUSTRIES, INC., Front St. and Erie Ave., Phila., Pa.

SKF

BALL AND ROLLER BEARINGS 3340

North Louisiana Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 U. S. Gallons

(Figures through 1930 from "Mineral Resources of the United States," published by Bureau of Mines, Department of Commerce. Figures after 1930 from weekly estimates of the American Petroleum Institute.)

YEAR	Bellevue	aCaddo	Cotton Valley	DeSoto	Elm Grove	Haynesville	Holly	Homer	Pleasant Hill	Red River (Bull Bayou Crichton)	Sarepta-Carterville	Urania	Zwolle	Others	Total
1905															
1906		3,000													3,000
1907		50,000													50,000
1908		500,000													500,000
1909		1,029,000													1,029,000
1910		5,091,000													5,091,000
1911		6,995,000													6,995,000
1912		7,178,000													7,178,000
1913		9,782,000													9,782,000
1914		7,572,000		3,834,000						402,000					11,808,000
1915		6,472,000		1,797,000					11,000	6,802,000					15,082,000
1916		5,464,000		1,657,000					9,000	4,691,000				1,000	11,822,000
1917		5,483,000		1,371,000					7,000	1,665,000				36,000	8,562,000
1918		11,144,000		1,066,000					4,000	1,046,000				45,000	13,305,000
1919		8,700,000		1,200 000				2,000		4,900,000				77,000	14,879,000
1920		86 336,000		*b*				21,508,000		5,923,000					33,767,000
1921		5,342,000		719,000		3,161,000		13,030,000		2,844 000				77,000	25,173,000
1922	1,050,000	4,498,000		531,000	160,000	19,939,000		5,673,000		1,778,000					33,629,000
1923	2,351,000	4,178,000		429,000	220,000	10,496,000		3,581,000		1,207,000				7,000	22,469,000
1924	1,749,000	4,319,000	1,211,000	353,000	217,000	6,720,000		2,837,000		1,231,000					18,637,000
1925	1,129,000	4,067,000	3,348,000	305,000	212,000	4,604,000		2,296,000		1,074,000		10,000			17,045,000
1926	788,000	4,749,000	2,914,000	321,000	222,000	3,328,000		2,033,000		1,037,000		3 669,000			19,061,000
1927	472,000	5,789,000	1,968,000	541,000	222,000	2,600,000		1,785,000		1,070,000		3,321,000			17,768,000
1928	323,000	4,798,000	1,731,000	463,000	185,000	2,150,000		1,548,000		1,109,000		2,487,000			14,794,000
1929	255,000	c4,589,000	1,040,000	276,000	178,000	1,806,000		1,405,000	278,000	987,000	*c*	2,155,000	131,000		13,100,000
1930	233,000	4,120,000	880,000	247,000	172,000	1,743,000	308,000	1,278,000	178,000	838,000	888,000	1,976,000	1,801,000		14,662,000
1931		3,352,500	376,950	*d*		1,906,050	193,150	1,064,100		*d*904,100	428,850	1,479,800	1,283,300	404,300	11,423,100
1932		2,596,750	236,400	*d*		1,566,750	102,050	1,025,850		*d*807,950	306,300	1,246,800	2,508,100	227,750	10,714,700
1933		2,295,300	109,350	*d*		1,399,900	73,700	930,500		*d*594,100	281,500	934,500	2,929,350	319,050	10,007,250
1934		2,246,250	191,100			1,371,350	66,000	967,650		545,600	257,200	1,122,400	1,688,650	381,850	9,271,500
Totals	8,350,000	138,738,800	14,095,800	15,110,000	1,788,000	62,791,050	742,900	61,044,100	487,000	41,455,750	2,161,850	18,401,500	10,431,400	1,575,950	377,607,550

CONVERSE
1934 433,450

a—Discovered in 1904, Caddo was first oil field in Louisiana. b—Caddo and DeSoto included together. c—Sarepta-Carterville included with Caddo. d—DeSoto included with Red River.

Louisiana Gulf Coast Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—*Mineral Resources*, published by the United States Bureau of Mines, Department of Commerce; records of various oil companies; files, records and compilations of *The Oil Weekly*.)

YEAR	Anse La Butte	Bayou Blue	Bayou Bouillon	Black Bayou	Caillou Island	Cameron Meadows	Choctaw	Dog Lake	Edgerly	East Hackberry	Fausse Pointe	Hackberry	Iowa	Jennings	Lake Barre
	St. Martin Parish	Iberville Parish	St. Martin Parish	Cameron Parish	Terrebonne Parish	Cameron Parish	Iberville Parish	Terrebonne Parish	Calcasieu Parish	Cameron Parish	Iberia Parish	Cameron Parish	Calcasieu and Jefferson Davis Parishes	Acadia Parish	Terrebonne Parish
1901														5,000	
1902	1,000													548,000	
1903	1,000													900,000	
1904	50,000													7,200,000	
1905	9,000													8,891,000	
1906	25,000													9,025,000	
1907	60,000													4,842,000	
1908	145,000													5,111,000	
1909	37,000													1,966,000	
1910	44,000													1,625,000	
1911	62,000													1,180,000	
1912	25,000								5,000					1,105,000	
1913	6,000								62,368					790,000	
1914	18,000								586,000					412,000	
1915	21,000								1,403,000					435,000	
1916	13,000		1,000						1,252,000					517,000	
1917	5,000								806,000					399,000	
1918	3,000								512,000					369,000	
1919			400						361,000					347,000	
1920									379,000					232,000	
1921	47,000								250,000					254,000	
1922	36,000								125,000					191,000	
1923	18,000								157,000					204,000	
1924	12,000								166,000					213,000	
1925	7,576								194,769					349,319	
1926	17,000								336,215					418,720	
1927	17,000								494,590	41,925	7,710			415,240	
1928	16,900		204,759						422,850	627,272	4,100	5,400		373,900	
1929	16,300	6,523	221,430	26,037				2,837	288,850	838,099		806,564		575,150	41,228
1930	10,647	25,368	76,405	176,698	6,005			88	142,380	610,703		426,543		527,834	399,246
1931	18,625	48,834	23,002	477,775		20,154	100,089		128,194	1,394,871		255,905	34,268	254,363	1,034,472
1932	16,364	1,891		347,266		23,063	148,321		69,556	2,055,539		198,375	488,996	295,441	2,766,558
1933	12,000	294,000		367,000		44,000	97,000		51,000	1,771,000		213,000	3,379 000	387,000	3,052,000
1934	(d)	(d)		426,700	1,343,900	(d)	(d)		58,050	1,692,450		193,800	5,257,150	454,000	1,791,400
Totals	770,412	376,616	526,996	1,821,476	1,349,905	87,217	345,410	2,925	8,250,822	9,031,859	11,810	2,099,677	9,159,411	$ 50,811,967	9,084,904

9 Features that Make for *UTMOST* DURABILITY

One of your primary requirements, in tanks, should be *LONG LIFE*—for that means economy. We have studied to build into MALONEY Tanks the *maximum durability* that it is possible to achieve in bolted steel tanks. Every material and every detail of construction has been developed with that end in view.

Note the 5 major factors in MALONEY durability illustrated at right.

Note also the following important details, which help to insure in this perfected tank a maximum period of service:

ALL SEAMS REINFORCED WITH HEAVY STEEL CHANNELS. This insures extra-sturdy construction, which will endure.

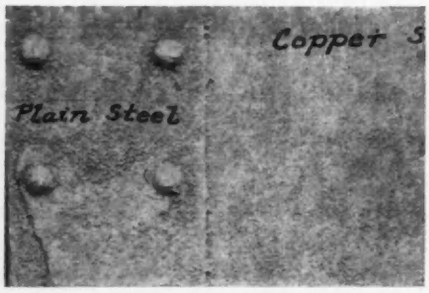
SPECIAL "GASO" SEAM AND JOINT PAINT. All inside seams and joints are liberally coated with this special paint, which gives extra protection against corrosion, to seams, bolts and channels.

NEW LARGE CLEANING-OUT PLATE, 30" x 48", heavily reinforced. This large, easily removable and replaced plate facilitates frequent and thorough cleaning to remove B. S. and other corroding elements which shorten tank life.

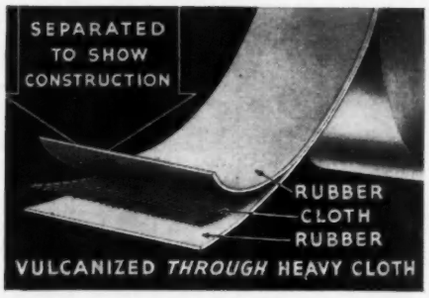
EXTRA-DURABLE PAINT. Inside coated with red, corrosion-resisting Chromated Iron Oxide Paint; outside painted with highest grade heat-reflecting Aluminum Paint, containing 1¾ pounds of fine-meshed Aluminum powder paste to every gallon of spar vehicle.

A. P. I. SPECIFICATIONS. All Maloneys are made in accordance with A. P. I. Specifications, rendering bottom, top and side sheets interchangeable. This is of distinct value when tanks are reassembled or when parts must be replaced.

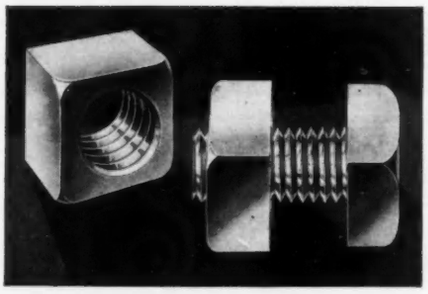
MALONEY DURABILITY insures lowest cost, in the long run. Capacities 65 to 10,000 barrels. Expert erection by skilled, reliable field crews. Distributors with adequate stocks at all principal petroleum points.



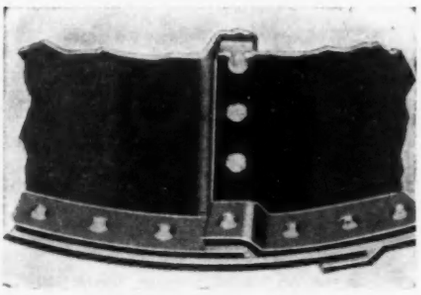
KEYSTONE COPPER STEEL. Exposure tests prove 200 to 500% greater corrosion resistance than in ordinary sheet steels.



SPECIAL RUBBER PACKING, cloth-inserted. Pliable, hugs bolts, will not tear. Durable in all products of crude.



BOLTS OF 90,000 POUNDS tensile strength. Heat-treated by Lamson & Sessions process. Will last as long as copper steel sheets.



PATENTED OFFSET construction at seams and joints. Secures accurate fit of parts. Eliminates stresses, prolonging life.

GUN-SPRAY PAINTING, inside and out, with best protective coatings, seals every pore in metal against corrosive action.

MALONEY TANK MFG. CO.

38 N. PEORIA

TULSA, OKLA.

PACKED IN STEEL-BOUND CRATES FOR EXPORT

Continued: Louisiana Gulf Coast Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—*Mineral Resources*, published by the United States Bureau of Mines, Department of Commerce; records of various oil companies; files, records and compilations of *The Oil Weekly.*)

YEAR	Lake Pelto Terrebonne Parish	Lake Washington Plaquemines Parish	Leesville La Fourche Parish	Lockport Calcasieu Parish	New Iberia Iberia Parish	Pine Prairie Evangeline Parish	Port Barre St. Landry Parish	Serrento Ascension Parish	Starks Calcasieu Parish	Sulphur Calcasieu Parish	Sweet Lake Cameron Parish	Vinton Calcasieu Parish	Welsh Jefferson Davis Parish	White Castle Iberville Parish	Total Louisiana Gulf Coast
1901															5,000
1902															549,000
1903													29,000		930,000
1904													43,000		7,293,000
1905													10,000		8,910,000
1906													23,000		9,073,000
1907													47,000		4,949,000
1908													31,000		5,287,000
1909													26,000		2,029,000
1910												26,000	54,000		1,749,000
1911												2,454,000	27,000		3,723,000
1912						5,000						932,000	22,000		2,094,000
1913						2,000						1,888,000	31,000		2,779,368
1914						1,000						1,465,000	18,000		2,500,000
1915												1,234,000	17,000		3,110,000
1916												1,540,000	17,000		3,340,000
1917					25,000	7,000						1,595,000	25,000		2,862,000
1918					33,000	5,000						1,839,000	4,000		2,765,000
1919					5,000							1,592,000	6,990		2,312,390
1920					5,000							1,333,000	2,500		1,951,500
1921												1,379,000			1,930,000
1922												1,395,000			1,747,000
1923												2,071,000			2,450,000
1924				128,000								1,968,000			2,487,000
1925				463,700								2,535,979			3,551,343
1926				1,297,500						1,000		2,343,720			4,414,155
1927				2,038,288					264,000	30,900	78,820	1,897,470			5,285,943
1928				1,449,700				291,011	184,800	966,400	661,013	1,642,500	1,860		6,852,465
1929	31,597			1,367,500	1,850		52,304	115,340	171,000	1,340,700	95,062	1,561,750	41,838	16,216	7,618,175
1930	56,290			1,164,733	2,497		968,011	28,655	206,624	1,351,195	196,846	1,820,000	56,714	301,140	8,554,620
1931	30,346	32,444	157,675	1,996,000			441,113	53,100	255,200	559,490	459,904	2,028,245	6,595	326,546	10,137,297
1932	20,727	157,336	268,172	968,170			555,071	19,500	289,700	821,720	271,259	1,477,408	14,327	194,608	11,665,017
1933	17,000	154,000	361,000	956,000			1,014,000	19,500	325,700	908,000	344,790	1,291,000	15,000	192,294	15,428,753
1934	(d)	(d)	4,358,300	709,600	(d)		989,900	(d)	(d)	1,281,950	(d)	1,182,750	(d)	198,200	23,301,400
Totals	155,960	343,780	5,145,147	12,539,191	72,347	20,000	4,020,399	527,104	1,697,024	7,261,355	2,097,694	40,491,822	569,824	1,229,004	173,634,426

NEW FIELDS IN 1932, 1933, AND 1934

	1932	1933	1934	Total
Bosco, Acadia-St. Landry Parishes	.....	.....	962,000	962,000
Darrow, Ascension Parish	805	8,000	(d)	8,805
Gueydan, Vermilion Parish	194,844	165,469	113,850	474,163
Others	.....	.....	2,287,400	2,287,400

(d) Included among "Others."

West Texas Crude Oil Production, by Fields and Counties, by Years.

Complete Production History of District, in Barrels of 42 U. S. Gallons

(Sources—Records of various oil companies; files, records, and compilations of *The Oil Weekly*; files of National Oil Scouts' Association's *Year Book.*)

YEAR	Bennett Ward County	Big Lake Shallow Reagan County	Big Lake Deep Reagan County	Chalk Howard Glasscock Counties	Church-Fields-McElroy Crane-Upton Counties	Cowden Ector County	Grand Falls Ward County	Hayslett Ward County	Hendricks (Kermit) Winkler County	Ira Scurry County	Judkins (Penn-Connell) Ector County	McCamey Taylor Upton-Crane Counties	Mertzon Irion County
1921					f								
1922													
1923		18,125											
1924		1,078,790								a			
1925		8,981,545								a		b	
1926		11,243,225		102,162	467,043				5,178	a	675	51,907,445	
1927		9,043,685		1,159,406	23,828,460				3,650,295	a	2,753	7,507,722	
1928		6,840,763	40,586	4,907,263	20,880,837				57,746,889	a	2,872	4,677,712	
1929	14,142	5,665,669	909,859	15,098,997	13,773,314		1,944	148,543	50,050,973	a29,079	14,095	3,477,928	
1930	59,086	4,452,782	2,756,775	11,387,343	11,682,963	7,168	28,091	145,780	26,236,830	8,586	3,193,212	2,633,239	24,523
1931	53,939	3,256,859	6,424,701	9,914,479	6,400,636	22,319	150,712	67,120	15,295,954	11,430	2,468,926	1,903,170	20,340
1932	110,023	3,100,135	5,692,192	6,566,339	5,567,744	20,375	489,457	76,899	10,742,061	9,514	1,623,199	1,551,560	11,481
1933	.....	2,441,000	3,845,000	5,449,000	4,631,000	114,000	.....	.....	8,256,000	d	1,723,000	1,462,000	8,000
1934	.....	e	e4,572,200	5,854,100	.....	.....	.....	.....	f 7,685,850	d	.....	.....	.....
Totals	237,190	56,122,878	24,241,313	60,439,089	87,231,997	163,862	670,204	438,342	179,670,030	58,609	9,028,732	25,120,776	64,344

a—1924-1928 production included with 1929. b—1925 production included with 1926.
c—1928 production included with 1929. d—Scurry County included with Mitchell County. e—All Reagan County included under "Big Lake Deep." f—All Winkler County included under Hendrick.

For Safe, Dependable Rotary Power...

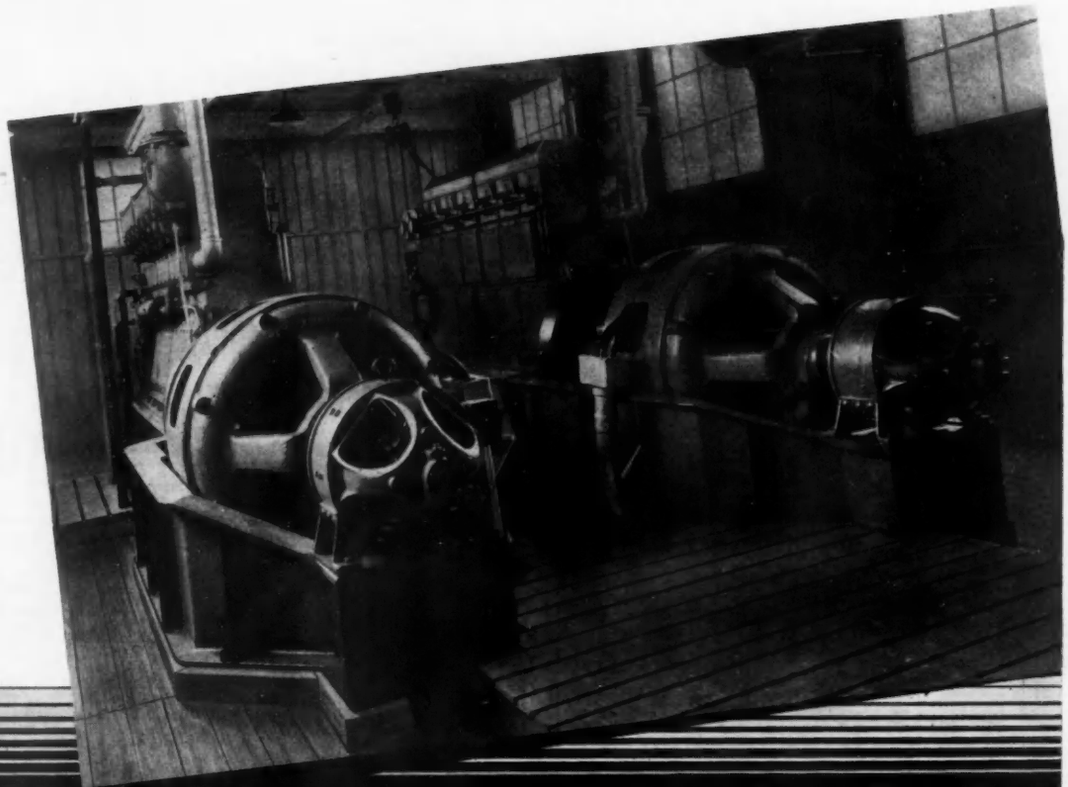
DIESEL-ELECTRIC DRILLING IS CHEAPER

ADD up the cost of your boiler fuel and water, and you may find that Diesel-electric power is much cheaper per foot of hole drilled.

The cost of fuel consumed by four boilers may amount to $200.00 per day with an equal cost for water. Yet a pair of Diesels may use no more than five barrels of fuel oil in 24 hours. And the cooling water used is negligible.

Consider Cooper-Bessemer Diesel economy for all your locations — and not wildcat drilling alone. For any location, you have the option of A. C. or D. C. operation, and the reliability of a modern self-contained power plant.

Why not avail yourself of Cooper-Bessemer's fund of experience? We build a complete line of oil-field Diesels from 35 to 1200 H. P. Write any of the district offices listed below.



14 WELLS have been drilled at low cost by the twin power plant illustrated. Dependable power for the draw works, rotary table, and mud pumps is supplied economically by two Type FP-6 Cooper-Bessemer Diesel engines rated 242 H. P. each at 514 r. p. m. and direct-connected to two 219 K. V. A. generators.

THE COOPER-BESSEMER CORPORATION

Mt. Vernon, Ohio — PLANTS — Grove City, Pennsylvania

640 East 61st Street, Los Angeles, Calif.
201 East First Street, Tulsa, Oklahoma
Magnolia Building, Dallas, Texas
25 West 43rd Street, New York City
225 Crockett Street, Shreveport, La.
505 Esperson Building, Houston, Texas

Continued: West Texas Crude Oil Production, by Fields and Counties, by Years.

Complete Production History of District, in Barrels of 42 U. S. Gallons

(Sources—Records of various oil companies; files, records, and compilations of *The Oil Weekly*; files of National Oil Scouts' Association's *Year Book*.)

YEAR	O'Brien-Hutchings Ward County	Pecos Valley Pecos County	Phillips-Pryor Pecos County	Rowan-Tong Pecos County	Shipley-Monroe Ward County	Skelly-Grayson Reagan County	Taylor-Link Pecos County	Toborg Pecos County	Waddell Crane County	Ward County Unclassified	Westbrook-Istan Mitchell County	Wheat Loving County	World (Powell) Crockett County	Yates Pecos-Crockett Counties	Four New Fields Andrews Crane Ector Counties	Total West Texas
1921																
1922											34,010					34,010
1923											166,145					184,570
1924											461,105					1,539,895
1925											798,895		3,320			9,783,760
1926											1,264,845		326,718	5,785		15,323,076
1927									2,993		1,514,557	17,282	516,000	5,098,062		52,341,215
1928		1,275				[e]			7,212		1,087,127	59,953	796,000	22,172,397		119,220,886
1929	282,979	28,694	3,120	1,526		c69,701	558,102		15,252		960,381	251,683	673,000	41,126,601		133,155,582
1930	685,552	42,635				62,893	1,481,576	445,658	12,054		768,070	671,463	566,205	41,119,802		108,452,286
1931	878,659	46,021				49,265	505,056	582,791	13,033		690,084	1,233,801	499,370	27,473,486		77,962,151
1932	1,691,508	105,385	2,418		3,420	42,232	292,470	490,683	10,856		551,906	1,130,710	404,148	22,661,450		62,948,165
1933		79,000	8,000			44,000	240,000	459,000		2,692,000	d733,000	924,000	306,000	20,223,000	139,000	53,776,000
1934										3,627,750	d467,950		259,500	15,499,100		51,613,700
Totals	3,518,698	303,010	13,538	1,526	3,420	268,091	3,077,204	1,978,132	61,400	6,319,750	9,498,075	4,288,892	4,350,261	195,379,683	139,000	686,335,296

FIELD	1934
Crane-Upton Cos.	6,208,700
Ector Co.	2,736,350
Jones-Fisher Cos.	2,286,350
Pecos Co outside Yates	884,750
West Texas Unclassified	1,531,100

West Central Texas Crude Oil Production, by Fields and Counties, by Years

Complete Production History of District, in Barrels of 42 U. S. Gallons

(*Sources.—Mineral Resources*, published by the United States Bureau of Mines, Department of Commerce; files of the *Year Book* of the National Oil Scouts' Association; records of various oil companies; and files, records, and compilations of *The Oil Weekly.*)

Year	Brown County	Callahan County	Coleman County	Desdemona Field	Eastland County	Haskell County	McMillen Runnels County	Noodle Creek-Tiner-Stebbins-Swann Jones Co.	Palo Pinto County (Strawn)	Shackelford County (Moran)	Sipe Springs Comanche County	Stephens County	Stephens Field Fisher County	Taylor Field Taylor County	Throckmorton County: South Half	Young County: South Half	Total West Central Texas
1913																	
1914										68,191							68,191
1915									50,498	109,116							159,614
1916									175,147	135,608							310,755
1917	6,040				93,053				340,950	68,118		36,219					544,380
1918	451,002		31,253		3,107,120				185,520	54,900		790,243					4,620,038
1919	213,256		46,590	7,375,825	22,379,665				101,300	32,500	1	10,514,216					40,663,352
1920	114,665		83,785	5,097,745	10,141,385				512,260	48,575	1	23,852,050				134,895	39,985,360
1921	122,475		66,190	2,467,115	5,887,420				262,055	50,455	1	31,037,710				2,820,080	42,713,500
1922	224,980		34,915	3,488,755	4,787,315				602,180	308,545	1	14,924,980				3,723,305	28,094,975
1923	222,655		48,465	2,761,735	3,764,085				402,920	1,426,180	1	10,062,055				2,351,080	21,039,175
1924	193,750	90,650	45,310	2,572,975	2,627,475				322,506	1,267,500	1	7,129,230				598,300	14,847,795
1925	760,285	1,285,215	60,199	1,358,407	2,352,583				228,000	1,084,675	1	5,729,035			44,355	3,432,320	16,335,074
1926	3,486,819	2,144,765	90,310	1,036,084	1,800,000			118,099	159,320	2,602,600	[1]1,038,675	4,414,270			179,774	2,767,580	19,838,296
1927	7,412,888	1,603,780	433,852	522,467	2,656,691		7,740	636,338	175,031	2,897,706	54,801	3,173,737			563,813	2,135,075	22,273,919
1928	4,208,914	1,344,561	1,025,425	422,547	2,210,134		38,809	903,933	158,633	3,670,523	42,723	2,620,858	186,501		426,258	1,434,831	18,694,650
1929	3,180,130	1,440,615	1,791,956	395,090	1,934,905	23,498	20,173	1,249,125	176,384	4,071,792	47,235	2,367,004	387,721	2,600	252,096	1,098,032	18,438,356
1930	2,249,797	1,196,818	1,219,260	352,754	1,565,811	17,480	9,908	548,787	204,870	2,305,052	45,523	1,993,953	538,399	37,724	305,133	2,217,206	14,808,475
1931	1,214,594	592,932	710,843	244,158	1,068,656	8,729	26,827	441,581	122,578	1,202,239	31,488	1,597,868	292,084	29,269	152,943	1,321,024	9,057,813
1932	956,662	656,055	897,030	291,696	943,789	12,161	29,647	445,246	145,895	1,440,864	22,448	1,418,046	225,134	23,852	194,909	1,237,517	8,940,951
1933	851,000	631,000	617,000	291,000	905,000	10,000	81,000	679,000	131,000	1,171,000	21,000	1,869,000	964,000	25,000	231,000	1,079,000	9,556,000
1934	831,400	615,550	506,150	[2]	[2]1,232,750	[3]	[3]	[3]	134,750	1,954,850	[3]	2,019,000	[3]	[3]	242,200	1,313,200	9,275,450
Total	26,701,312	11,601,941	7,708,533	28,678,353	69,457,837	71,868	214,104	5,022,109	4,591,896	25,970,989	1,303,893	125,549,474	2,593,839	118,445	2,592,481	27,663,445	340,266,119

FIELD	1934
West Central Texas, Unclassified	425,600

[1]1919-1925 production at Sipe Springs included with 1926. [2]Desdemona included with Eastland County. [3]Included with "West Central Texas, Unclassified."

Combining EFFICIENCY *with Life-time* SERVICE

LUFKIN TWIN CRANK UNIT ASSEMBLY WITH BASE FOR MULTI-CYLINDER GAS ENGINE DRIVE.

Years of experience designing oil well pumping units, plus very close co-operation with practical operators in the field, have developed a standardized Lufkin product combining the highest of efficiency obtainable with gear ratings based on life-time service.

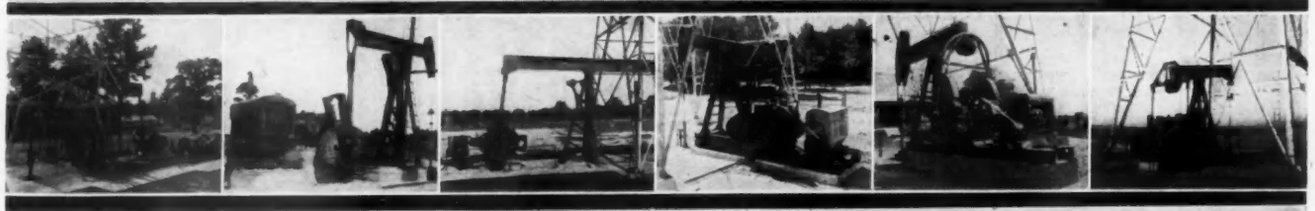
Illustrated particularly on this page are two views of our Twin Crank Unit Assemblies. This type of equipment is now available in horsepower capacities from 10 to 60 and in strokes up to 72". They are adaptable to any type prime mover—are simple in design, yet very rugged and strong in construction—compact and easily portable.

The complete line of Lufkin Units covers a carefully designed proportional arrangement of sizes to meet every present known requirement. Both single and double crank types of units may be had in four sizes with the choice of either single or double reduction herringbone gears. Beams, Posts and Pitmans and surface equipment for Central Power Pumping are available and designed for their particular application.

A letter addressed to the Lufkin Foundry & Machine Co., Lufkin, Texas, or to branches in principal oil fields will bring latest details. Export office 149 Broadway, New York. Cable address LUFFO.

LUFKIN T. C. 6-11 UNIT ASSEMBLY WITH MOTOR MOUNTED UNDER SAMSON POST MAKING A VERY COMPACT ARRANGEMENT.

Specify LUFKIN *Pumping Units*



TYPICAL LUFKIN INSTALLATIONS OF VARIOUS TYPES OF UNITS.

South Texas Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—Records of various oil companies; files, records and compilations of *The Oil Weekly*; files of the *Year Book* of the National Oil Scouts' Association.)

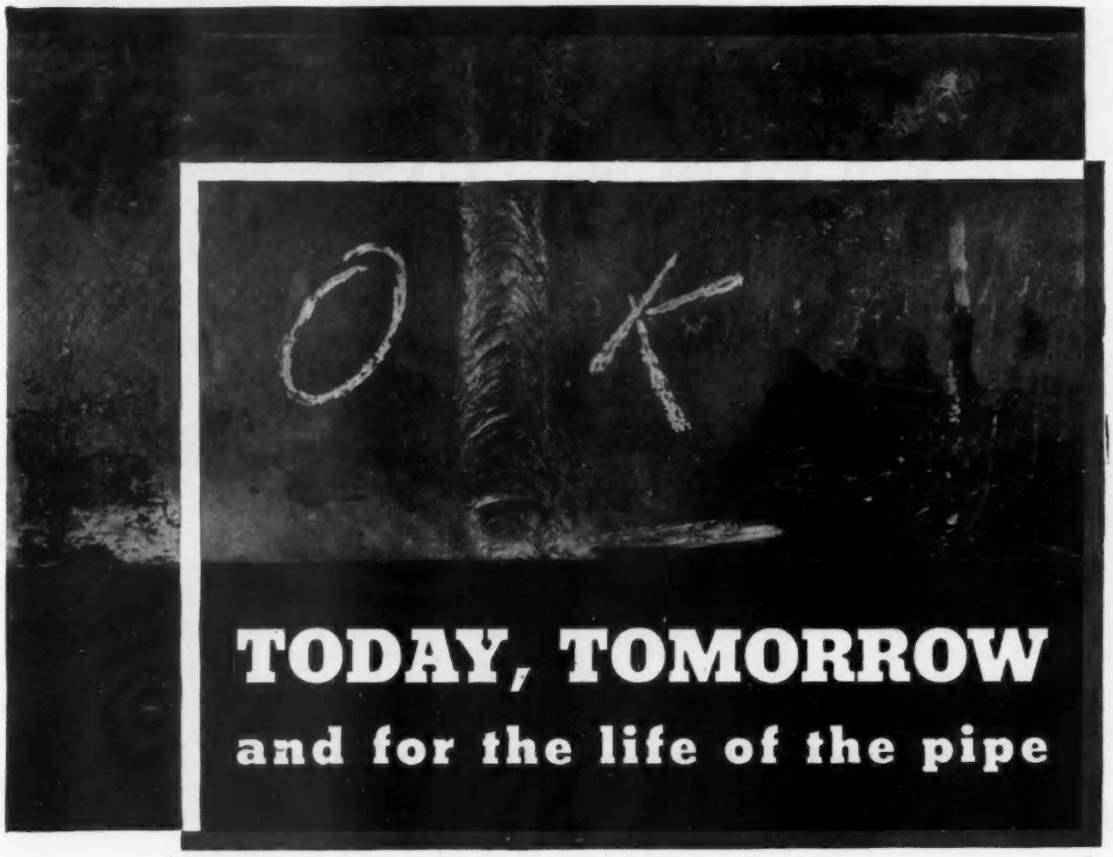
YEAR	Agua Dulce	Albercas	Alworth	Aviator	Calliham	Carolina-Texas	Charco Redondo	Cole and West Cole	Crowther	Cuellar	Driscoll	Escobas	Government Wells
	Nueces County	Webb County	Zapata and Jim Hogg Counties	Webb County	McMullen County	Webb County	Zapata County	Webb and Duval Counties	McMullen County	Zapata County	Duval County	Zapata County	Duval County
1921						(x)							
1922				(x)	50,000	(x)							
1923				(x)	200,000	(x)							
1924				(x)	246,931	(x)		Gas					
1925				(x)	115,557	(x)		Gas					
1926				2,193,186‡	48,145	15,805‡	4,546	128,593					
1927			Gas	843,444	29,000	9,156	10,303	14,771					
1928		722,512	Gas	842,462	24,000	7,304	31,541	502,310		30,103			35,637
1929		940,452	10,875	430,060	20,000	32,350	40,122	563,447	25,000†	205,508	66,559		552,004
1930	800	307,442	5,447	338,597	10,202	57 658	20,714	489,334		814,553	108,466	690,101	557,283
1931	18,341	169,698	7,580	280,529	7,861	39,882	12,571	440,960		822,016	86,819	1,047,366	1,566,005
1932	3,472	111,318	3,249	229,265	11,625	26,218	9,407	485,915		324,254	66,608	1,483,437	2,795,672
1933	8,000	67,000	2,000	198,000	29,000	25,000	2,000	354,000		111,000	54,000	895,000	4,180,000
1934													
Totals	30,613	2,318,422	29,151	5,055,543	792,321	213,373	131,204	2,979,330	25,000	2,307,434	382,452	4,115,904	9,686,601

YEAR	Henne-Winch-Fariss	Kingaville	Kohler	Lease-holders	Los Olmos	Lucas	Mariana (O'Connor)	*Mirando City	Mirando Valley	Nor-manna	Palan-gana	**Pettus	Piedras Pintas
	Jim Hogg County	Kleberg County	Duval County	Webb County	Starr County	Live Oak County	Victoria and Refugio Counties	Webb County	Zapata County	Bee County	Duval County	Bee County	Duval County
1921									(x)				
1922				5,000				(x)	(x)				
1923				10,000				(x)	(x)				
1924	(x)			8,000				(x)	(x)				
1925	(x)			2,000				(x)	(x)				17,000
1926	2,320,621‡	50,159						5,553,311‡	458,335‡				93,000
1927	506,438	146,131	5,786					629,680	32,186				
1928	188,471	152,567	24,637					489,235	27,656		3,281		
1929	89,966	119,610	39,808					423,827	25,984		350		
1930	46,517	38,748	101,338					322,113	18,039	7,106		1,638,315	
1931	19,282	40,469	85,875		2,100	12,675	1,000	270,241	15,609	9,879		2,408,993	
1932	8,226	27,828	56,208		98,793	25,834	24,080	254,429	12,957			1,836,020	
1933	4,000	26,000	52,000		153,000	20,000	21,000	218,000	12,000			1,212,000	
1934												1,012,100	
Totals	3,183,521	601,512	365,652	25,000	253,893	58,509	46,080	8,160,836	602,766	16,985	3,631	8,107,428	110,000

YEAR	Randado	Refugio Heavy Oil	Refugio Light Oil	Roma	Saxet	Slick	S.R.C.	White Point	TOTAL SOUTH TEXAS
	Jim Hogg County	Refugio County	Refugio County	Starr County	Nueces County	Goliad and DeWitt Counties	Duval County	San Patricio County	
			NEW FIELDS IN 1932, 1933, AND 1934						
				1932	1933	1934	Total		
			Greta, Refugio Co.	.....	1,217,000	3,919,350	5,136,350		
			Rio Grande City, Starr Co.	17,928	32,000	.....	49,928		
			Sarnosa, Duval Co.	194,599	354,000	.....	548,599		
			Jacob, McMullen Co.	44,202	123,000	.....	167,202		
			Keeran, Victoria Co.	45,458	96,000	.....	141,458		
			Laurel, Webb Co.	134,365	341,000	.....	475,365		
			Moca, Webb Co.	.....	101,000	.....	101,000		
1921			Cuevitas, Starr Co.	.....	2,000	.....	2,000		(x)
1922			Eagle Hill, Duval Co.	.....	19,000	.....	19,000		(x)+ 55,000
1923			Seeligson, Jim Wells Co.	.....	1,000	.....	1,000		(x)+210,000
1924			Duval Co. Unclassified	.....	.....	7,538,000	7,538,000		(x)+254,931
1925	(x)		Laredo District outside Duval Co.	.....	.....	2,473,900	2,473,900		(x)+134,557
1926	886,024‡		Others	.....	.....	905,550	905,550		11,751,725‡
1927	1,070,874								3,297,769
1928	630,306	61,285							3,473,307
1929	488,892	1,963,235	29,719	756	.....	.....	.....	.....	6,068,524
1930	344,239	9,554,085	2,106,387	3,353	9,370	.....	12,914	1,080	17,604,201
1931	248,878	4,440,117	5,048,006	1,022	151,486	15,625	54,118	14,368	17,339,371
1932	183,064	1,899,183	1,601,890	4,000	496,560	27,605	53,490	19,023	12,616,182
1933	141,000	1,079,000	1,044,000	4,000	876,000	11,000	29,000	16,000	13,129,000
1934	.....	.....	1,435,400	.....	710,600	.....	.....	.....	17,994,900
Totals	3,993,277	18,996,905	11,265,402	13,131	2,244,016	54,230	149,522	50,471	103,929,467

NOTES FOR SOUTH TEXAS PRODUCTION TABLES

*Comprises area formerly subdivided as three pools: Mirando City-Schott, Mid-Ojuelos, and Wolcott. **Comprises production of all these closely related pools: McKinney, Pettus Townsite, Damac, Cosden, and Grayburg. (x) Included below with figures for 1926. ‡Includes previous years marked "(x)" †Includes production of previous years marked (**).



TODAY, TOMORROW
and for the life of the pipe

More than a million pipe line joints welded by the shielded arc with Lincoln equipment have passed all the required inspections and tests for strength, ductility and tightness. Stronger than the pipe, more ductile than the pipe and equal in density, shield-arc welded joints outlasts the pipe. Time and again accelerated corrosion tests have proven shield-arc welds have greater resistance to corrosion.

Long after you have forgotten the greater speed and ease of welding pipe lines with *"Shield-Arc"* welders and *"Fleetweld"* electrodes, the record of no leaks and no breaks in the joints will remind you of the high quality welds this Lincoln equipment produces. Find out why *"Shield-Arcs"* weld more O. K. joints per day at lower cost. Ask The Lincoln Electric Company, Cleveland, Ohio. Largest Manufacturers of Arc Welding Equipment in the World.

POP "That other welder salesman didn't like it very well when the engine driven '*Shield-Arc*' with its automatic idling device showed 35% less fuel consumption than his machine."

LAD "Yes, I noticed he slammed the Lincoln outfit pretty hard. Sign this order for '*Shield-Arcs*', Pop. It will prove to him that whenever you sling mud, you lose ground."

W-101

LINCOLN
"SHIELD-ARC" WELDERS

South Central Texas Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—Records of various oil companies; files, records and compilations of *The Oil Weekly*; files of the *Year Book* of the National Oil Scouts' Association.)

YEAR	Alta Vista	Branyon	Buchanan (Brown-Cade)	Chapman	Cooksey	Dale	Darst Creek	Eckert (Dobrowolski)	Ina	Larremore (Lockhart)	Love Ranch	Luling	Lytton Springs	Manford	Minerva-Rockdale
	Bexar County	Caldwell County	Caldwell County	Williamson County	Bexar County	Caldwell County	Guadalupe County	Bexar County	Medina County	Caldwell County	Kerr County	Caldwell County	Caldwell County	Guadalupe County	Milam County
1915															
1916															
1917															
1918															
1919															
1920															
1921															1,000
1922												2,000			93,600
1923									**			2,248,000			230,462
1924									**			11,134,000			218,439
1925									**			9,706,346	2,570,709		253,366
1926									**			7,832,575	1,955,555		348,266
1927						60,318			**			5,871,132	742,193		481,162
1928		13,890				306,373		1,000	**	37,388		5,016,889	484,217		308,800
1929		10,521	7,328			172,157	146,754	10,000	†115,000	64,627		4,195,473	353,624	70,379	290,000
1930		9,379	56,347	1,775,503	1,722	109,963	11,588,975	49,000	5,163	20,221		3,603,713	292,784	158,727	213,852
1931	40,000*	4,475	30,041	1,169,585	4,498	93,266	7,971,394	71,536	5,110	19,513		2,955,277	245,277	48,367	134,150
1932		9,651	23,383	430,610	26,646	78,203	5,991,250	102,743	5,430	23,713		2,650,836	215,129		117,000
1933		11,000	18,000	263,000	13,000	163,000	4,355,000	159,000	5,150	17,000		2,364,000	184,000		107,000
1934				210,300		277,900	3,305,500					2,122,450	167,950		
Totals	40,000	58,916	135,099	3,848,998	45,866	1,261,180	33,358,873	393,279	135,853	182,462		59,702,691	7,211,408	277,473	2,797,097

South Central Texas Crude Oil Production, by Fields, by Years—(Continued)

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—Records of various oil companies; files, records and compilations of *The Oil Weekly*; files of the *Year Book* of the National Oil Scouts' Association.)

YEAR	Mission and Gas Ridge	Ottine	Salt Flat	Schimmel-Batts	Somerset	Taylor Pool (Hondo)	Thrall	Yoast (Cedar Creek	Yturri-Southton	Total South Central Texas
	Bexar County	Gonzales County	Caldwell County	Bastrop County	Bexar and Atascosa Counties	Medina County	Williamson County	Bastrop County	Bexar County	
1915							613,182			613,182
1916							432,695			432,695
1917							176,887			176,887
1918					58,400		137,000			195,400
1919					94,100		91,200			185,300
1920					245,135		60,000			305 135
1921					482,340		73,280			556,620
1922					955,510		51,100		**	1,102,210
1923					1,335,499		34,210		**	3,848,171
1924					1,023,157		24,930		**	12,400,526
1925					1,115,626	**	16,935		**	13,662,982
1926					789,627	**	15,500		**	10,941,523
1927					754,271	**	13,200		**	7,922,276
1928			290,535		670,495	**	12,903	5,272	**	7,147,762
1929		1,500	13,476,120		475,000	12,000†	12,500	475,944	†342,596	20,231,523
1930		10,467	7 325,448		528,604	2,921	12 200	151,512	50,204	25,966,705
1931	18,000*		4,402,711		423,780	2,920	12,500	63.049	49,626	17,765,045
1932			3,019,384		361,812	3,085	12,675	57,768	34,248	13,327,905
1933			2,023,000		318,000	2,400	16,000	53,900	31,000	10,369,550
1934			1,617,600		287,600					7,989,300
Totals	18,000	11,967	32,154,798		9,918,956	23,326	1,818,897	806,545	507,674	155,140,697

NEW FIELDS IN 1932 AND 1933

	1932	1933	Total
Carroll Estate		1,000	1,000
Dunlop (Caldwell Co.)	164,339	38,000	202,339
Hilbig (Bastrop Co.)		228,000	228,000

NOTES FOR SOUTH CENTRAL TEXAS PRODUCTION TABLES.

*Also includes production of previous years back to about 1912. **Included below with figure marked "(†)". †Also includes production of previous years marked "(**)".

Texas Panhandle Crude Oil Production, by Counties, by Years

Complete Production History of District, in Barrels of 42 U. S. Gallons

(Sources—Files, records and compilations of *The Oil Weekly*, and records of various oil companies; *Minerals Resources*, published by the Bureau of Mines.)

YEAR	Carson County	Gray County	Hutchinson County	Moore County	Potter County	Wheeler County	Unclassified	Total
1924							272,000	272,000
1925							1,132,000	1,132,000
1926			24,000,340				751,000	24,751,340
1927	3,280,538	4,143,300	32,881,393	11,907	11,973	698,446		41,027,557
1928	2,445,169	7,846,898	13,878,117	287,753	9,013	362,834		24,829,784
1929	2,860,201	18,563,727	8,923,381	509,213	5,113	263,954		31,125,589
1930	2,999,079	22,299,201	7 416,710	167,565	3.395	223,645		33,109,595
1931	1,810,654	15,007,468	3,851,675	355,390	182	129,087		21,154,456
1932	1,874,184	11,391,868	4,454,248	404,328		128,468		18,253,096
1933	1,778,000	10,310,000	3,954,000	338,000		144,000		16,524,000
1934	1,909,150	12,293,950	4,504,200	243,600		1,321,200	83,900	20,356,000
Totals	18,956,975	101,856,412	103,864,064	2,317,756	29,676	3,271,634	2,238,900	232,535,417

Because YOU CAN'T STOP VIBRATION HERE

Know your Ropes ...This is a helpful hint, how to make wire rope last longer. Subsequent Wickwire Spencer advertisements in this publication will give other dollar saving information. Tell us about your rope problem and we will give you the answer.

Rapid hoisting always sets up severe vibration in the rope directly above the point of load attachment. There is no known way to prevent it. Although visual examination of the rope at this point may not disclose broken wires, the strength of the section from 5 to 20 feet above the load attachment is bound to be greatly reduced because of crystalline fatigue within the wires. It is therefore advisable to cut this damaged section off periodically even though it may still look sound. About ⅓ the estimated life of the rope is a good interval. A breaking test of the discarded piece proves the wisdom of this safeguarding practise.

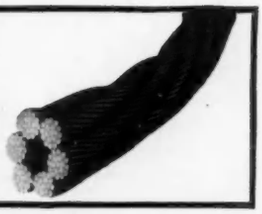
•

WICKWIRE SPENCER STEEL COMPANY, New York City; Buffalo, Chicago, Worcester; *Pacific Coast Headquarters:* San Francisco; *Warehouses:* Portland, Los Angeles and Seattle. *Export Sales Dept.,* New York.

WIRE ROPE *by Wickwire Spencer*

BOTH...STANDARD LAY AND WISSCOLAY PREFORMED.

Wickwire Spencer manufactures all sizes and types of Wire Rope in standard lays and preformed. Wisscolay preformed wire rope will often solve a wire rope application difficulty. Ask our engineers where and when it should be used. Send for a free WIRE ROPE BOOK. It will prove of great value.



Texas Gulf Coast Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

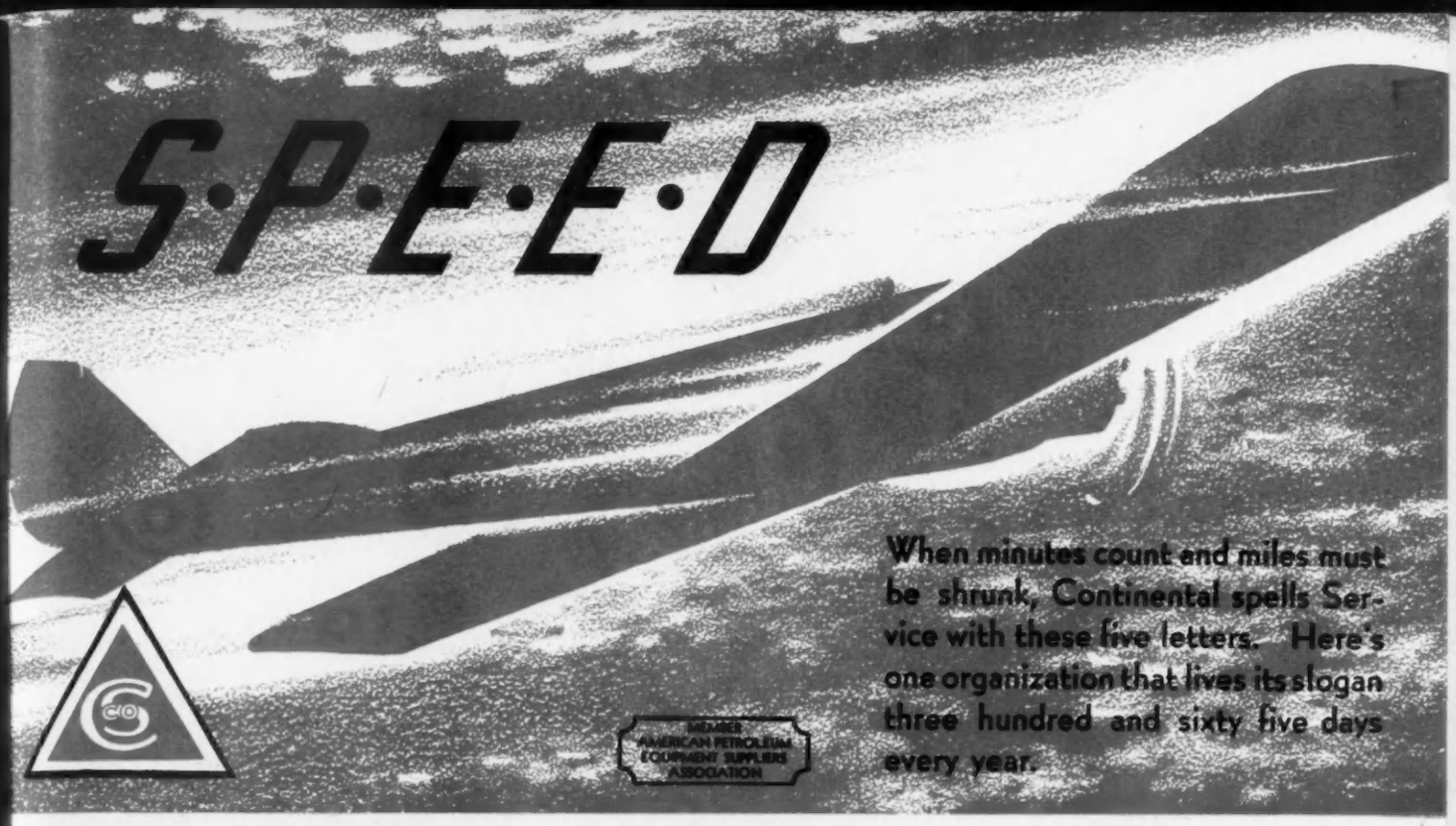
(Sources.—*Mineral Resources*, published by the United States Bureau of Mines, Department of Commerce; records of various oil companies; files, records and compilations of *The Oil Weekly.*)

YEAR	Allen	Barbers Hill	Batson	Conroe	Big Creek	Big Hill (Jefferson)	Big Hill (Matagorda)	Blue Ridge	Boling	Brenham	Clay Creek	Damon Mound	Esperson	Fannett
	Brazoria County	Chambers County	Hardin County	Montgomery County	Fort Bend County	Jefferson County	Matagorda County	Fort Bend County	Wharton and Fort Bend Counties	Washington and Austin Counties	Washington County	Brazoria County	Liberty County	Jefferson County
1901														
1902														
1903			4,518											
1904			10,904,737				151,936							
1905			3,790,629				46,470							
1906			2,388,238				8,000							
1907			2,166,554				4,500							
1908			1,593,570				(a)							
1909			1,206,214											
1910			1,113,767											
1911			1,023,493											
1912			844,563											
1913			741,350											
1914			775,804											
1915			703,686							(b)		500		
1916		500	744,915							(b)				
1917			692,417							(b)		400,864		
1918		20,000	654,950							(b)		486,640		
1919		169,415	502,200					10,000		(b)		434,700		
1920		136,375	484,035					173,085		(b)		1,259,375		
1921		49,885	516,225					461,035		(b)		1,353,960		
1922		236,185	430,265		3,700			415,560		(b)		945,410		
1923		172,660	391,857		16,800	6,000		332,445		(b)		822,355		
1924		72,437	541,687		298,999	6,000		317,603		(b)		544,676		
1925		46,712	545,567		329,096			302,607	40,800	(b)		419,011		
1926		146,312	481,657		523,697			483,355	1,203,500	15,000c		344,552		
1927	2,922	68,575	532,870		1,223,435			1,122,395	791,255	12,500		336,640		
1928	17,457	322,950	498,550		834,250			2,302,300	828,400	47,330	5,607	363,150		3,800
1929	3,473	4,471,010	495,968		1,478,167			1,218,507	600,544	76,246	607,006	236,425	48,460	295,300
1930	26,385	7,866,963	422,674		1,381,559			652,645	376,730	52,606	619,187	226,552	846,486	342,200
1931	11,410	8,210,798	338,533	1,000	850,514			401,457	280,866	33,111	494,023	312,878	733,237	179,800
1932	5,079	7,458,145	294,599	2,571,416	425,952			350,573	190,769	20,461	476,507	236,453	508,277	145,200
1933	3,000	8,026,000	208,000	21,518,000	409,000			288,000	125,000	10,100	321,918	261,000	481,433	145,500
1934	(d)	6,880,600	223,700	17,253,000	359,450	(d)	(d)	309,150	139,750	(d)	263,650	218,400	462,350	195,350
Totals..	71,726	44,355,522	36,257,792	41,343,416	8,134,619	12,000	(a)210,906	9,140,717	4,577,614	267,354	2,787,898	9,203,541	3,080,243	1,307,150

(a) Small production at Big Hill (Matagorda) after 1907 (estimated at not over 200,000 barrels) included with Markham.
(b) Included below with (c).
(c) Also includes production of previous years indicated by (b).
(d) Included among "Others."

YEAR	Goose Creek	Hankamer	High Island	Hockley	Hoskins Mound	Hull	Humble	Lost Lake	Manvel	Markham	Moss Bluff	Mykawa	Nash	North Dayton
	Harris County	Liberty County	Galveston County	Harris County	Brazoria County	Liberty County	Harris County	Chambers County	Brazoria County	Matagorda County	Liberty and Chambers County	Harris County	Fort Bend County	Liberty County
1901														
1902														
1903														
1904					10,000									
1905					10,000		18,066,428							60,294
1906					5,000		3,570,845							192,460
1907					5,000		2,930,842							120,036
1908	2,000						3,778,521			62,640(a)				39,901
1909							3,237,060			29,103				17,647
1910							2,495,511			455,999				9,582
1911							2,426,220			561,828				4,344
1912	43,808						1,829,923			300,000				12,151
1913	249,641						1,504,880			294,553				13,329
1914	134,748						2,799,458			164,192				18,791
1915	119,336						11,061,302			137,481				10,378
1916	397,291						10,925,805			158,336				8,571
1917	7,300,279						7,389,831			128,011				9,995
1918	9,419,132					330,300	5,645,104			99,540				7,442
1919	7,288,716					1,476,405	3,270,617			53,260				1,000
1920	5,666,390					4,468,615	3,692,115			75,775				1,000
1921	5,647,020					9,717,970	3,098,500			89,405				30 410
1922	5,248,065		2,700			6,819,135	2,552,940			34,730				38,925
1923	6,251,761		12,500	3,000		7,732,139	2,449,744			39,290				74,983
1924	4,020,264		19,141	3,614		7,286,670	2,244,795			73,003				27,451
1925	3,661,098		124,200			7,183,796	1,751,720			34,336				6,508
1926	3,281,670		58,420			6,662,650	1,545,375			45,200			207,128	25,700
1927	2,979,425		93,500			6,220,530	1,158,300			148,705			394,647	57,579
1928	2,551,950		170,450			4,167,200	683,150			109,200			490,730	210,000
1929	2,146,559	18,122	447,378			3,428,716	3,077,939	101,239		132,051		1,446	193,064	195,850
1930	1,685,402	542,325	341,376			3,169,929	6,330,411	210,136		110,094	12,254	24,000	101,293	457,800
1931	1,509,583	782,000	272,700			2,234,635	3,083,196	98,300	75,307	228,201	121,108	50,249	66,635	226,576
1932	1,291,572	670,100	1,507,926	938		1,912,481	2,229,687	127,186	161,000	529,475	39,862	101,104	52,464	110,674
1933	1,160,000	535,000	2,468,000	13,000		2,006,000	1,787,000	83,565	597,790	375,000	6,000	98,000	30,000	57,000
1934	1,244,300	369,750	2,773,400	(d)	(d)	3,538,400	1,251,350	(d)	1,024,900	405,650	(d)	160,900	(d)	56,550
Totals....	73,300,010	2,926,297	8,291,691	20,552	30,000	77,355,571	117,869,069	620,426	1,858,997	(a)4,875,058	179,224	444,705	1,535,961	2,102,972

(a) Small production at Big Hill (Matagorda) after 1907 (estimated at not over 200,000 barrels) included with Markham


S·P·E·E·D
When minutes count and miles must be shrunk, Continental spells Service with these five letters. Here's one organization that lives its slogan three hundred and sixty five days every year.
MEMBER AMERICAN PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION

TRUSTWORTHY - ENDURABLE - PROTECTIVE

WESTCOTT

Flow Line Valves, Drilling Valves, Choke Valves, Check Valves and Pipe Line Valves.

•

Wherever wells are drilled you will find Wescott Hookups. They are made for any pressure from 200 lbs. to 3000 lbs. pre-tested at factory to double rated working pressure, easily installed. Wescott Valves are your guaranty of economical security.

"Serving the Oil and Gas Industries"

THE CONTINENTAL SUPPLY COMPANY

General Offices: DALLAS, TEXAS

THE CONTINENTAL SUPPLY CO., Ltd., 618 Lancaster Bldg., Calgary, Alberta, Can.
Export Offices: CONTINENTAL EMSCO CO., Inc., 30 Rockefeller Plaza, New York
London Offices: Dashwood House, Old Broad Street, London, E. C. 2, England
CONTINENTAL EMSCO S.A.R. Strada Marfurilor, Ploesti, Roumania

CONTINENTAL

SERVING THE OIL AND GAS INDUSTRIES

YOUNGSTOWN

The production of dependably-uniform oil country pipe is a problem that can be solved only by arduous, painstaking, unremitting attention to a hundred complex details, no one of which can be slurred or slighted.

Throughout Youngstown production the rule is check ... check ... check ... and recheck. Inspection and testing are rigorous and unceasing. The finished product emphatically demonstrates the value of the procedure.

THE YOUNGSTOWN SHEET AND TUBE COMPANY
Manufacturers of Carbon and Alloy Steels
General Offices - - - - YOUNGSTOWN, OHIO

Youngstown's Pipe is distributed by —
THE CONTINENTAL SUPPLY COMPANY, Dallas, Texas
REPUBLIC SUPPLY CO. OF CALIFORNIA, Los Angeles
THE YOUNGSTOWN STEEL PRODUCTS CO., Dashwood House, Old Broad Street, London, E. C. 2, England

Continued: Texas Gulf Coast Crude Oil Production, by Fields, by Years

Complete Production History of District, in Barrels of 42 Gallons

(Sources.—*Mineral Resources*, published by the United States Bureau of Mines, Department of Commerce; records of various oil companies; files, records and compilations of *The Oil Weekly.)*

YEAR	Orange	Orchard	Pierce Junction	Port Neches	Rabb Ridge	Raccoon Bend	Rock-land	Saratoga	Sour Lake	South Liberty	Spindle Top	Stratton Ridge	Sugar-land	West Columbia	Total Texas Gulf Coast
	Orange County	Fort Bend County	Harris County	Orange County	Fort Bend County	Austin and Waller Counties	Jasper County	Hardin County	Hardin County	Liberty County	Jefferson County	Brazoria County	Fort Bend County	Brazoria County	
1901								5,000			3,593,113				3,598,113
1902								10,000	44,338		17,420,949				17,475,287
1903								150,000	8,848,159		8,600,905				17,603,582
1904								739,239	6,442,357		3,433,842				21,682,111
1905								2,922,215	3,369,012		1,600,379				29,865,427
1906								2,289,057	2,156,010		1,075,755				11,685,365
1907								2,198,585	2,354,997		1,615,513				11,396,027
1908								1,634,786	1,595,060		1,747,537				10,454,015
1909								1,183,559	1,703,798		1,388,170				8,765,551
1910								1,024,348	1,518,723		1,182,436				7,809,366
1911								925,777	1,364,880		965,939				7,272,481
1912								1,116,655	1,175,108		822,916				6,145,124
1913	17,706							937,720	1,348,053		716,374				5,823,606
1914	43,208							889,743	5,209,208		580,130				10,615,282
1915	21,697							864,266	4,114,622		388,266				17,422,034
1916	17,758							781,128	4,923,332		340,441				18,298,077
1917	7,023							682,797	4,763,004		308,039			100	21,682,360
1918	3,425							790,740	3,115,033		502,265			136,350	21,210,921
1919	4,400							616,110	2,740,142		458,680			8,122,809	25,154,454
1920	4,000							913,735	2,073,485		323,995			10,563,150	26,835,130
1921	704,870		1,403,940					936,695	1,749,625		321,080			12,573,450	37,654,070
1922	5,492,345		1,145,225					661,870	1,737,685		295,015	5,000		11,631,750	37,696,595
1923	5,311,995		322,565					700,661	2,091,961		309,315	3,500		6,598,589	33,644,120
1924	4,182,342		163,316					544,910	1,650,148		364,763	9,000		4,964,503	27,335,322
1925	5,023,620		292,356					587,507	1,585,054	4,551,290	428,873			4,230,115	31,144,266
1926	3,746,257	76,717	907,235					455,975	1,815,352	2,117,757	13,370,005			3,330,767	40,844,281
1927	1,877,190	21,100	3,163,585			1,000		417,561	1,647,731	1,108,830	21,264,935			3,459,220	48,104,430
1928	1,459,939	45,700	3,983,484			96,775	1,800	393,075	1,221,749	1,404,499	14,332,357		389,745	2,928,949	39,864,546
1929	1,050,848	43,700	5,247,190	252,575		2,089,909	10,990	348,704	986,150	2,296,458	9,903,417		3,950,545	2,376,008	47,831,965
1930	82,178	629,075	3,966,309	687,276		3,866,149	5,604	451,476	814,832	1,558,157	5,944,902		4,272,979	1,901,379	50,718,329
1931	630,718	494,550	2,965,971	513,342	800,200	2,692,333	1,347	366,038	686,479	716,066	3,114,646		4,204,673	1,492,240	39,283,720
1932	487,325	486,500	1,832,559	564,000	4,194,140	1,771,323	5,183	322,820	620,762	390,966	1,307,315	560	3,485,606	1,332,915	38,342,851
1933	334,000	405,500	1,559,000	396,200	4,930,000	1,501,000	3,900	298,000	476,000	261,000	1,158,000	12,000	2,538,000	1,198,000	57,230,119
1934	294,650	451,450	1,174,750	566,600	4,223,650	1,462,250	(d)	276,500	457,150	187,950	1,152,150	(d)	2,190,300	1,040,200	53,972,250
Totals	31,536,494	2,654,292	28,127,485	2,979,993	14,147,990	13,510,739	28,824	27,437,252	76,399,999	14,592,973	120,332,417	30,060	21,031,849	77,886,494	887,452,087

NEW FIELDS IN 1932, 1933, AND 1934

	1932	1933	1934	Total
Arriola, Hardin Co.	7,630	191,000	329,500	528,130
Buckeye, Matagorda Co.	105,455	273,000	(d)	378,455
Cleveland, Liberty Co.	.....	1,300	(d)	1,300
Garwood, Colorado Co.	.....	2,000	(d)	2,000
Livingston, Polk Co.	392	412,000	731,000	1,143,392
Louise, Wharton Co.	.....	5,913	(d)	5,913
Pledger, Brazoria Co.	500	16,000	(d)	16,500
Tomball, Harris Co.	.....	245,000	969,950	1,214,950
Others	.....	.....	1,303,600	1,303,600

(d) Included among "Others."

North Texas Crude Oil Production by Fields and Counties, by Years.

Complete Production History of District, in Barrels of 42 U. S. Gallons

(Sources.—*Mineral Resources*, published by the Bureau of Mines, Department of Commerce; records of various oil companies; files, records and compilations of *The Oil Weekly.)*

Year	Archer Co. (Holliday)	Baylor County	Burk-burnett Field	Clay Co. (Petrolia)	Cooke County	Electra Field	Foard County	Jack County	K-M-A-Iowa Park	Montague County	Throck-morton County, North Half	North Texas Unclassified	Wilbarger County	Wichita-Wilbarger Cos. Unclassified	Young Co., North Half	Total
1904				65,455												65,455
1905				101,651												101,651
1906				111,072												111,072
1907				83,260												83,260
1908				82,639												82,639
1909				113,485												113,485
1910				126,531												126,531
1911			a	168,965		a								899,579		1,068,544
1912			a	197,421		a								4,227,104		4,424,525
1913			a	344,868		a			a					8,131,624		8,476,492
1914			a	550,585		a			a					8,227,951		8,778,536
1915			a	349,857		a			a					5,833,386		6,183,243
1916	a		a	302,145		a			a					7,837,386		8,139,531
1917	a		a	382,420		a			a					9,541,636		9,924,056
1918	a		a	297,320		a			a					12,159,032		12,456,352
Total prior to 1919 as published originally by The Oil Weekly.																
	a		a	3,277,674		a			a					56,857,698		60,135,372
Total prior to 1919 reclassified with aid of oil company records.																
	505,228		11,189,594	3,277,674		43,433,477			134,624					1 594,775		60,135,372
1919	58,230		25,865,757	212,624		4,177,171			177,950							30,491,732
1920	49,850		27,840,120	135,385		3,744,665			1,310,700							33,080,720
1921	422,205		18,561,730	132,295		4,205,510			1,417,715							24,739,455
1922	849,680		11,486,740	121,295		6,606,320			937,445							20,001,480
1923	5,088,630		9,174,020	164,635		8,856,089		16,360	793,285							24,093,019
1924	10,869,051		7,109,190	119,095		7,332,990		10,930	1,338,510				271,255			27,051,021
1925	13,578,085	44,420	5,206,550	147,680		6,294,455		8,755	1,742,690	111,265			3,189,720			30,323,620
1926	11,722,895	62,663	4,581,192	149,745	95,862	5,693,005			1,692,708	912,210			4,975,367		53,935,894	33,821,541
1927	9,705,822	32,432	4,131,232	241,003	1,390,508	5,376,775		292,719	1,435,560	2,244,877			4,496,622		1,620,668	30,968,218
1928	7,288,040	33,623	3,609,116	187,453	1,011,952	4,857,688		530,006	1,319,958	3,105,194			8,218,219		1,505,136	31,666,385
1929	6,597,512	32,960	3,233,489	247,292	2,350,351	4,534,309	40,016	1,104,136	1,806,516	2,444,658			10,464,452		1,479,082	34,334,773
1930	5,978,830	345,925	2,931,489	274,835	1,265,818	3,931,863	63,990	1,096,110	1,909,365	2,297,837			7,757,318		2,791,237	30,644,617
1931	4,397,983	213,350	2,249,158	209,468	617,699	3,176,672	24,681	619,878	1,240,139	1,344,251			4,193,224		2,950,835	21,237,338
1932	4,104,705	162,019	1,947,150	192,745	575,142	2,964,200	27,139	550,885	1,000,750	1,484,659			3,317,120		2,105,023	18,431,537
1933	4,685,000	109,000	1,857,000	165,000	566,000	2,921,000	81,000	484,000	901,000	1,521,000	4,000		2,890,000		1,963,000	18,147,000
1934	6,879,400	d	1,955,200	d	c	2,798,950	d	508,350	831,450	c2,235,500	d	658,550	3,061,550	d	2,268,150	21,197,100
Total	92,781,146	1,036,392	142,928,727	5,978,224	7,873,332	120,905,139	236,826	5,222,129	19,990,365	17,701,451	4,000	658,550	52,834,847	1,594,775	20,619,025	490,364,928

a—Included under Wichita-Wilbarger Counties. b—Includes production during and prior to 1926. c—Cooke County included with Montague County. d—Included under "North Texas Unclassified."

East Central and East Texas Crude Oil Production, by Fields, by Years

Complete production history of district, in barrels of 42 U. S. Gallons.

(Sources—*Structure of Typical American Oil Fields, Volume 1*, published by the American Association of Petroleum Geologists; records of various oil companies; and files, records, and compilations of *The Oil Weekly*).

YEAR	Boggy Creek	Cedar Creek	aCorsicana	Powell	Currie	East Texas field	Marion Co. (West edge Caddo field)	Mexia	bNacogdoches	Nigger Creek	North Currie	Richland	Shelbyville (Shelby Co.)	Van	Wortham	Total
1889									48							48
1890-1895									312							312
1896			1,450													1,450
1897			65,975													65,975
1898			544,620													544,620
1899			668,483													668,483
1900			829,560	5,479												835,039
1901			763,424	37,121												800,545
1902			571,079	46,812												617,891
1903			401,817	100,143												501,960
1904			374,318	129,329												503,647
1905			312,595	131,051												443,646
1906			336,387	675,842												1,012,229
1907			276,311	596,897												873,208
1908			211,117	398,649												609,766
1909			180,764	383,137												563,901
1910			137,331	450,188			251,717									839,236
1911			128,526	373,055			677,689									1,179,270
1912			233,282	251,240			362,870									847,392
1913			158,830	283,476			262,392									704,698
1914			133,811	282,279			180,584									596,674
1915			143,275	237,410			123,464									504,149
1916			135,263	215,729			64,971									415,963
1917			131,828	196,855			57,952									396,635
1918			c361,980													361,980
1919			c150,000						95,000							245,000
1920			c530,000						75,000							605,000
1921			c305,335		8,905			5,783,236	103,035							6,200,511
1922			c245,705		2,005,012			33,937,513	58,875		d					26,247,105
1923			e	30,373,335	1,741,774			18,044,375	39,145		d					50,198,629
1924			e	32,935,899	981,921			10,466,567	37,920		77,184	3,341,714			888,856	48,730,061
1925			e	17,176,938	470,717			6,700,444	11,746		76,547	1,725,028			15,946,673	42,108,093
1926			e	10,022,324	335,098			4,769,732		1,572,899	82,307	504,782			2,801,123	20,088,265
1927	14,760	86,285	e	5,839,114	249,048			3,622,385		972,291	41,813	272,576			1,134,231	12,232,503
1928	325,744	147,449	e	3,949,245	196,204			2,517,744		221,850		198,537			647,472	8,204,245
1929	1,132,130	40,832	e	2,776,615	158,430			1,908,247		119,043f		131,291		250,068	410,810	6,927,466
1930	1,153,359	17,799	215,000	2,026,017	125,936	27,220		1,529,162		71,721		72,130		7,693,956	287,825	13,220,125
1931	622,704	5,432	e	1,257,577	90,758	105,726,036		1,156,386		26,871		27,176		15,670,961	126,609	124,710,510
1932	370,256		100,000	965,244	65,466	120,446,483		935,601				15,046		17,322,795	51,864	140,272,755
1933	279,000		100,000	1,000,000	53,000	171,802,000		836,000				14,000		17,242,000	45,000	191,376,478
1934	220,100		c 897,650		57,550	158,370,100		794,400				(f)		14,666,700	36,850	175,730,000
Totals	4,118,053	297,797	c 122,762,716		6,539,819	556,371,839	1,981,639	93,001,792	b421,081	2,984,675	277,851	6,302,280		72,846,480	22,377,313	890,975,463

NEW FIELDS

	1933	1934	Total
Long Lake	5,478		5,478
Cayuga		582,050	582,050
Richland-Tacoma		19,300	19,300
Others		85,300	85,300

a—Completed in 1894, Corsicana discovery well ushered in first important oil production in Texas, although Nacogdoches yielded small quantities earlier. b—Information not available on all of the small production at Nacogdoches, which is distinguished as the first field in Texas, having been discovered in 1841; Nacogdoches is credited with having had its first commercial production in 1889, when 48 barrels was sold, while the amount sold had increased to about 360 barrels by the end of 1895. c—Corsicana and Powell combined. d—North Currie production in 1922 and 1923 included with that for 1924. e—Small production, but no figure available. f—Included under "Richland-Tacoma."

Eastern States Production in 1934

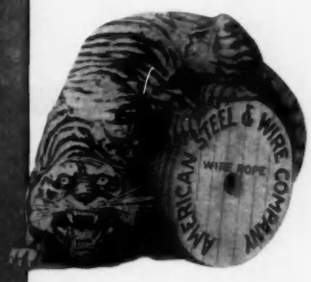
DISTRICT	Bbls. Prod.
Pennsylvania Grade—	
Allegany	2,880,700
Bradford	11,967,500
Kane to Butler	2,420,100
Southwestern Pennsylvania	966,250
Southeastern Ohio	1,608,500
West Virginia	4,043,550
Pennsylvania Grade Total	23,886,600
Others, Eastern	12,738,350
Total	36,624,950

Michigan Production in 1934

FIELD OR DISTRICT	Bbls. Prod.
[1]Western Michigan	29,700
[1]Eastern Michigan	25,900
[2]Mt. Pleasant Area	331,650
[2]Porter-Yost	998,450
[2]Mt. Pleasant	8,874,200
[1]Muskegon	282,600
[1]Saginaw	47,100
Total	10,589,600

[1]Western and Eastern Michigan include production outside Mt. Pleasant, shown prior to November 17 as Saginaw and Muskegon.
[2]Mt. Pleasant Area and Porter-Yost reported prior to November 17 as "Mt. Pleasant."

"I ~~HOPE~~ KNOW I PURCHASED THE RIGHT ROTARY LINE"



A SILVER STRAND ELIMINATES DOUBT

IN THE selection of Wire Lines—the difference between "know" and "hope" is frequently the difference between economy and needless cost. There is never a doubt, as far as Wire Line quality is concerned—or economy either—when a Silver Strand governs choice. Monitor Silver Strand Rotary Lines are made exclusively by the American Steel & Wire Company—the largest manufacturers of Wire Lines in the world—and service records prove them superior in wear, strength and endurance. Perfectly constructed of the highest quality steel—and with abrasion resisting factors—they are waiting to serve you—to substitute "know" for "hope" in your next Rotary Line order.

AMERICAN STEEL & WIRE COMPANY

MONITOR

SILVER STRAND ROTARY LINES

AMERICAN STEEL & WIRE COMPANY

208 SOUTH LA SALLE STREET • • CHICAGO

Offices in All Principal Cities

United States Steel Corporation Subsidiary

THE LAYNE

MILLED GROOVE SCREEN

offers

Greater Flow
Less Sanding Up
Utmost Safety
Longest Life

● Years of manufacturing experience and research combined with the motive to produce the best possible, led to the perfection of the Layne Milled Groove Keystone Wire Wrapped Screen.

Its record of satisfactory performance in thousands of wells the world over has proven the value of The Layne Screen. Leading Operators, Contractors and Drillers specify Layne when screening their wells.

Use The Layne Screen in your wells for Greater Flow; Less Sanding Up; Utmost Safety and Longest Life.

The LAYNE
SCREW THRU RATCHET PACKER

This latest Layne product assures a perfect pack, approximately 20 inches long between liner and casing. It is easily and quickly installed, and will remain in place indefinitely.

For further information

LAYNE & BOWLER CO. HOUSTON TEXAS

1934 Annual Field Statistical Review 1934

Wells Drilled for Oil and Gas in the United States—1859-1934

YEAR	Wells Completed	Producers	Gas Wells	Failures	Initial Production	Average per Well
1859—1922[1]	615,353	481,863	14,542[2]	118,948	18,842,525[3]	.....
(Following figures taken from weekly statistics as reported to and published in THE OIL WEEKLY.)						
1923	20,513	13,407	1,892	5,214	5,920,019	395
1924	21,713	14,311	2,250	5,152	3,248,211	227
1925	25,406	16,162	2,644	6,600	4,640,924	183
1926	28,995	17,787	2,848	8,360	3,876,811	218
1927	22,301	13,396	2,586	6,319	4,628,246	345
1928	19,964	10,982	2,733	6,249	6,406,370	583
1929	23,463	13,125	3,109	7,229	6,404,145	488
1930	19,848	10,745	3,006	6,097	10,443,833	972
1931	11,716	6,618	2,090	3,008	31,590,024	4,773
1932	14,290	10,151	1,012	3,127	49,471,119	4,873
1933	11,700	7,322	1,003	3,375	21,888,052	2,990
1934	17,508	11,552	1,324	4,632	31,345,350	2,713
Totals.....	852,770	627,421[5]	41,039[4]	184,310	198,705,629[6]	[3]

[1]Taken from Annual Bulletins of the United States Bureau of Mines.
[2]Gas wells during the period prior to 1916 were included with producers.
[3]Initial production prior to 1916 not available.
[4]Includes only gas wells completed since 1916.
[5]Includes gas wells completed prior to 1916.
[6]Includes only initial production reported since 1916.

Comparative Summary of Field Operations, 1934 and 1933

(Sources.—All field statistics compiled from well records published in *The Oil Weekly*, except for California, which are from monthly reports of the American Petroleum Institute. Production statistics compiled from weekly estimates of the American Petroleum Institute.)

TOTAL UNITED STATES SUMMARIZED

STATE OR SECTION	Completions		Oil Wells		Gas Wells		Failures		Initial Oil Production Barrels Daily		[1]Total Barrels Oil Production	
	1934	1933	1934	1933	1934	1933	1934	1933	1934	1933	1934	1933
Oklahoma	1,925	1,204	1,222	687	95	82	608	435	989,927	797,209	176,506,550	176,421,450
Kansas	926	619	632	407	21	25	273	187	327,090	218,733	45,577,050	41,750,750
Texas	9,912	6,443	7,307	4,650	268	140	2,337	1,653	28,728,266	20,163,941	358,128,700	370,456,700
Louisiana	801	532	400	202	78	50	323	280	196,021	100,308	32,572,900	25,495,500
Arkansas	93	38	35	6	1	.....	57	32	8,645	372	11,412,100	11,474,400
Eastern States	2,265	1,933	946	815	765	658	554	460	27,926	17,394	36,624,950	33,782,650
Michigan	483	306	298	223	47	10	138	73	185,293	152,734	10,589,600	7,842,150
Southeastern States	43	50	.....	2	9	15	34	33	.....	175	.....	.....
Rocky Mountain States	256	104	157	46	32	18	67	40	31,208	6,720	16,716,550	14,194,450
New Mexico	129	60	100	41	7	.....	22	19	265,340	156,362	16,529,050	13,974,750
California	675	411	455	243	1	5	219	163	585,634	274,104	175,678,362	173,083,319
Totals	17,508	11,700	11,552	7,322	1,324	1,003	4,632	3,375	31,345,350	21,888,052	[1]880,335,812	[1]868,476,119

[1]Arrived at by calculating weekly estimates of American Petroleum Institute for individual fields as shown in tabulations on following pages. The American Petroleum Institute basis production figures do not conform with official figures of the Bureau of Mines for 1933, which appear elsewhere in this issue; or with 1934 figures as presented in this issue by calculating on a Bureau of Mines basis for 11 months, with December estimated by The OIL WEEKLY. The difference between the two sets of figures is accounted for by the fact that American Petroleum Institute does not attempt to account for surreptitiously produced crude oil, of which there was apparently considerable both in 1934 and 1933, particularly in the East Texas field. The official United States production, Bureau of Mines figures, for 1933 was 905,656,000 barrels; the corresponding figure for 1934, with December estimated, is 910,051,000 barrels.

On the following pages will be found complete field statistics from every available domestic field or district showing wells completed, producers, gas wells, failures, initial production and where available total production for 1934. For a comparison with previous years see the Annual Statistical Number of The Oil Weekly January 29, 1934, and previous years.

1934 Annual Field Statistical Review 1934

EASTERN STATES

Summary of Field Development in 1934

STATE	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
New York	14	14	....	....	190
Pennsylvania	262	194	42	26	2,199
Ohio	1,075	327	478	270	6,031
Kentucky	281	193	4	84	13,529
Illinois	18	5	1	12	119
Indiana	179	63	36	80	2,250
West Virginia	436	150	204	82	3,608
Totals	2,265	946	765	554	27,926

Pennsylvania

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Allegheny	9	1	5	3	2
Beaver	8	2	....	6	6
Bradford	118	115	....	3	765
Butler	9	9	....	....	78
Center-Middle	9	8	....	1	22
Clarion-Venango	9	8	1	....	18
Fayette	3	....	3	....	.....
Greene	34	11	18	5	76
Washington	63	40	15	8	1,232
Totals	262	194	42	26	2,199

Kentucky

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Allen	8	2	....	6	3
Barren	2	2	....	....	10
Daviess	4	2	....	2	40
Hancock	42	28	1	13	1,850
Henderson	7	5	1	1	100
Logan	1	1	....	....	20
McLean	13	10	....	3	1,025
Muhlenberg	1	....	....	1	.....
Ohio	203	143	2	58	10,481
Totals	281	193	4	84	13,529

West Virginia

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Boone	28	2	24	2	15
Cabell	20	....	19	1	.....
Calhoun	61	15	37	9	168
Clay	5	3	2	....	19
Doddridge	9	5	4	....	25
Gilmer	29	15	10	4	465
Gilmore	3	....	2	1	.....
Hancock	1	1	....	....	2
Harrison	2	2	....	....	3
Jackson	1	....	....	1	.....
Kanawha	17	3	13	1	40
Lincoln	5	....	5	....	.....
Logen	1	....	1	....	.....
Marion	4	2	1	1	5
Marshall	3	1	2	....	8
Mingo	1	....	1	....	.....
Monongalia	5	1	4	....	20
Nichols	1	....	1	....	.....
Pleasants	12	3	6	3	33
Putman	3	....	3	....	.....
Ritchie	136	62	38	36	2,547
Roane	38	20	12	6	224
Tyler	13	4	....	9	7
Wayne	4	3	1	....	8
Wetzel	15	1	12	2	1
Wirt	15	5	6	4	14
Wood	4	2	....	2	4
Totals	436	150	204	82	3,608

Ohio Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Southeastern Ohio	276	106	91	79	580
Central Ohio	701	177	366	158	4,397
Northwestern Ohio	98	44	21	33	1,054
Totals	1,075	327	478	270	6,031

Southeastern Ohio

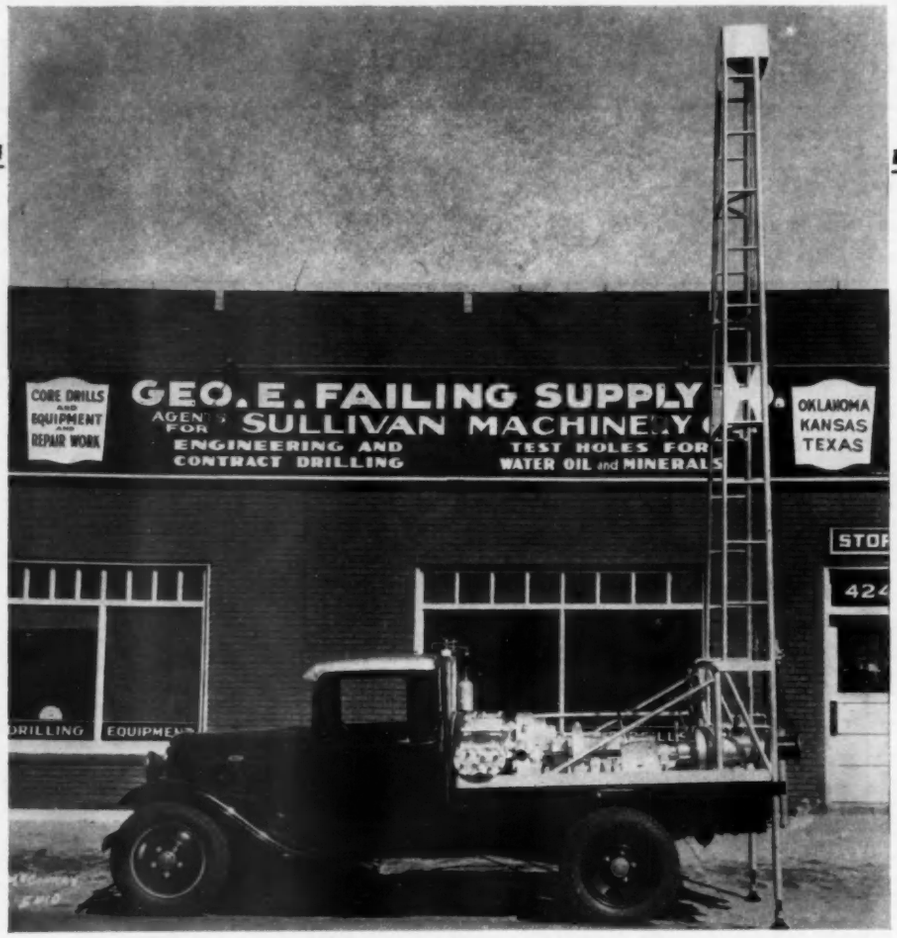
COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Gallia	6	....	4	2	.....
Monroe	91	21	45	25	302
Morgan	35	15	10	10	29
Noble	34	13	10	11	38
Salem	1	1	....	....	4
Washington	109	56	22	31	207
Totals	276	106	91	79	580

Central Ohio

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Ashland	40	17	16	7	141
Athens	35	1	26	8	6
Belmont	35	6	18	11	66
Carroll	1	....	....	1	.....
Columbiana	8	8	....	....	71
Coshocton	28	19	3	6	1,153
Cuyahoga	6	1	4	1	15
Fairfield	16	....	12	4	.....
Geauga	1	....	....	1	.....
Guernsey	82	12	52	18	180
Harrison	1	....	....	1	.....
Hocking	13	7	3	3	253
Holmes	21	7	7	7	143
Huron	3	....	3	....	.....
Jefferson	14	4	1	9	22
Knox	31	7	12	12	448
Lawrence	5	....	4	1	.....
Licking	61	37	11	13	848
Lorain	26	3	10	13	83
Medina	45	21	11	13	179
Meigs	78	1	70	7	4
Muskingum	29	13	8	8	402
Perry	18	4	14	....	274
Richmond	4	....	4	....	.....
Scioto	1	....	1	....	.....
Stark	68	....	60	8	.....
Summit	3	....	2	1	.....
Tuscarawas	15	6	8	1	75
Vinton	5	1	2	2	1
Wayne	8	2	4	2	33
Totals	701	177	366	158	4,397

Northwestern Ohio

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Allen	8	6	1	1	275
Auglaize	1	1	....	....	1
Darke	1	....	1	....	.....
Hancock	10	4	1	5	126
Hardin	8	3	3	2	28
Henry	3	2	1	....	45
Lucas	1	1	....	....	7
Marion	2	....	1	1	.....
Ottawa	1	1	....	....	9
Sandusky	7	1	....	6	4
Seneca	7	....	5	2	.....
Shelby	3	2	....	1	6
Van Wert	7	5	....	2	45
Wood	2	....	....	2	.....
Wyandot	37	18	8	11	508
Totals	98	44	21	33	1,054



CORE
DRILLING

»

SEISMOGRAPH
SHOT
HOLES

»

WATER
WELLS

An Entirely New and Modern Machine

"SIZMO"

No. 34 Failing Drill Unit

Introducing extreme portability in a combination drill suitable for the rapid drilling of vertical core drill tests for mineral or geological prospecting, especially adapted for the rapid drilling of seismograph shot holes and the drilling of water wells.

These drills have successfully operated throughout the swamps and marshes of the Gulf Coast region. Every moving part is built to last from long life alloy steels. Proven performance where the going is tough.

GEORGE E. FAILING SUPPLY COMPANY

Branch Office: HOUSTON, TEXAS *Main Office:* ENID, OKLAHOMA

Affiliated With

SULLIVAN MACHINERY COMPANY

WRIGLEY BUILDING CHICAGO, ILLINOIS

1934 Annual Field Statistical Review 1934

Illinois

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Clark	4	3	....	1	14
Clinton	1	....	....	1	.....
Coles	1	....	....	1	.....
Crawford	2	....	1	1	.....
Cumberland	1	....	....	1	.....
Fayette	2	....	....	2	.....
Monroe	2	....	....	2	.....
St. Clair	3	1	....	2	90
Wabash	2	1	....	1	15
Totals	18	5	1	12	119

Indiana

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Adams	1	1	....	....	35
Daviess	5	2	2	1	92
Dubois	5	....	1	4	.....
Gibson	27	13	4	10	821
Greene	1	....	....	1	.....
Hancock	3	....	2	1	.....
Harrison	3	....	2	1	.....
Hendricks	1	....	....	1	.....
Henry	1	....	....	1	.....
Jay	10	3	7	....	28
Knox	13	3	3	7	160
Kosciusko	1	....	....	1	.....
Madison	2	....	2	....	.....
Marion	1	....	1	....	.....
Martin	2	....	....	2	.....
Monroe	2	1	....	1	40
Perry	21	7	2	12	217
Pike	18	7	6	5	142
Posey	6	4	....	2	155
Randolph	1	....	1	....	.....
Scott	1	....	....	1	.....
Shelby	1	....	....	1	.....
Spencer	4	3	....	1	80
Sullivan	6	1	2	3	25
Vanderburg	39	17	....	22	420
Warwick	2	1	....	1	35
Washington	2	....	1	1	.....
Totals	179	63	36	80	2,250

Michigan

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Allegan	1	....	....	1	.....
Arenac	4	....	....	4	.....
Bay	2	....	....	2	.....
Clare	2	....	....	2	.....
Genesee	2	....	....	2	.....
Gratiot	4	....	....	4	.....
Huron	1	....	....	1	.....
Ionia	1	....	....	1	.....
Isabella	100	35	31	34	4,119
La Peer	9	3	....	6	14
Mecosta	18	....	11	7	.....
Midland	227	212	....	15	177,226
Monroe	1	....	....	1	.....
Montcalm	20	5	4	11	776
Muskegon	5	2	1	2	70
Newaygo	1	....	....	1	.....
Oceana	18	11	....	7	591
Ogemaw	45	28	....	17	2,486
Osceola	3	....	....	3	.....
Saginaw	14	2	....	12	11
Shiwassee	2	....	....	2	.....
St. Clair	2	....	....	2	.....
Wayne	1	....	....	1	.....
Totals	483	298	47	138	185,293

New York

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Allegany	14	14	....	...	190

SOUTHEASTERN STATES

Southeastern States Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Alabama	2	....	....	2	.....
Mississippi	39	....	9	30	.....
Tennessee	2	....	....	2	.....
Totals	43	....	9	34	.....

Alabama

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Clark	1	....	....	1	.....
Washington	1	....	....	1	.....
Totals	2	....	....	2	.....

Mississippi

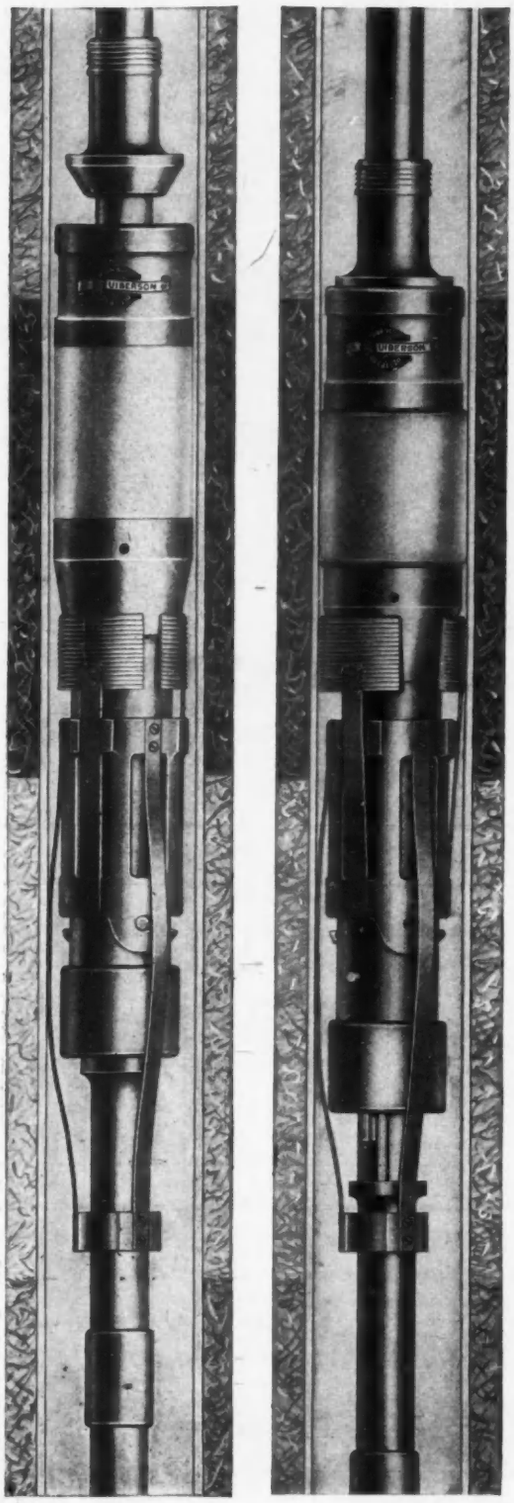
COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Baldwin	1	....	....	1	.....
Clarke	2	....	....	2	.....
Franklin	1	....	....	1	.....
Greene	2	....	....	2	.....
Hancock	1	....	....	1	.....
Hinds	6	....	6	....	.....
Hinds (Flora)	1	....	....	1	.....
Issaquena	1	....	....	1	.....
Jones	1	....	....	1	.....
Lamar	2	....	....	2	.....
Madison	1	....	....	1	.....
Marion	1	....	....	1	.....
Newton	2	....	....	2	.....
Pearl River	3	....	1	2	.....
Pike	1	....	....	1	.....
Rankin	9	....	2	7	.....
Simpson	1	....	....	1	.....
Tallahatchie	1	....	....	1	.....
Warren	1	....	....	1	.....
Wayne	1	....	....	1	.....
Totals	39	....	9	30	.....

Tennessee

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Prod. (Bbls. daily)
Haywood	2	....	2	....	.....

RUNS IN AGAINST PRESSURE

because flow passes **THRU** *Packer*



Because the fluid and gas can pass freely upward *through* the packer, between shell and tubing—the GUIBERSON Control Head Packer can be successfully run in wells flowing up to 2,500 bbls. of oil. Yet it answers all the purposes of an ordinary packer.

While the packer is being run, it retains the position shown at extreme left, with the valve at top wide open to permit passage of gas and fluid. When it reaches a position 12 to 18 inches above the point at which it is to be set, the tubing is given a half-turn to the left, disengaging the hooks on the cage. The friction springs then hold the cage and slips stationary, while the tubing is lowered until valve is closed, slips have engaged casing, and packing rubber has been expanded to give a positive seal. This closed position is shown in second illustration.

Valve can be opened at any time by lifting the tubing a few inches. Packer can be re-set lower or higher with greatest ease without pulling the tubing. When pulling out, swabbing effect is avoided, as the valve is open, permitting free passage of fluid downward.

Expert operators like this packer because it is completely under control, at all times. Its principle of operation is protected by basic patents.

THE GUIBERSON CORPORATION
Box 1106, Dallas, Texas

LOS ANGELES: 1304 Security Title Insurance Bldg.
TULSA: 504 Wright Bldg.—HOUSTON: 635 Norfolk Street
PONCA CITY: 321 S. Osage Street—NEWARK, O.: First and Locust Streets

GUIBERSON

BETTER BE SAFE THAN SORRY

1934 Annual Field Statistical Review 1934

ROCKY MOUNTAIN STATES

Rocky Mountain States—Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Wyoming	51	28	11	12	7,603	12,371,100
Montana	179	125	19	35	14,693	3,224,550
Colorado	23	4	2	17	8,912	1,120,900
Utah	3	....	....	3	.....	.....
Totals	256	157	32	67	31,208	16,716,550

Colorado

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Arapahoe	1	....	....	1	.....	.....
Archuleta	1	....	....	1	.....	.....
Boulder	3	....	1	2	.....	.....
El Paso	2	....	....	2	.....	.....
Florence	....	....	....	....	.....	85,500
Ft. Collins & Wellington	....	....	....	....	.....	184,300
Fremont	1	....	....	1	.....	.....
La Plata	1	....	....	1	.....	.....
Larimer	2	....	....	2	.....	.....
Moffat-Craig	4	2	....	2	3,680	172,400
Moffat Co., Hiawatha Dome	1	....	1	....	.....	.....
Moffat Co., Iles Dome	2	2	....	....	5,232	.....
Park	2	....	....	2	.....	.....
Routt	2	....	....	2	.....	.....
Routt Co., Tow Creek Field	1	....	....	1	.....	.....
Others	....	....	....	....	.....	678,700
Totals	23	4	2	17	8,912	1,120,900

Utah

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
San Juan	3	....	....	3	.....	.....
Totals	3	....	....	3	.....	.....

Wyoming

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Albany	2	1	....	1	60	.....
Big Muddy	....	....	....	....	.....	642,050
Carbon	4	1	3	....	110	.....
Converse	2	....	1	1	.....	.....
Elk Basin	....	....	....	....	.....	199,800
Fremont	4	....	1	3	.....	.....
Grass Creek	....	....	....	....	.....	344,200
Hot Springs	3	2	1	....	600	.....
La Barge	....	....	....	....	.....	449,100
Lance Creek	....	....	....	....	.....	113,500
Lincoln	2	2	....	....	27	.....
Lost Soldier	....	....	....	....	.....	568,800
Natrona	1	1	....	....	275	.....
Oregon Basin	....	....	....	....	.....	681,950
Park Co., Unclassified	8	5	2	1	5,510	.....
Park Co., Frannie Field	2	2	....	....	650	.....
Rock River	....	....	....	....	.....	558,650
Salt Creek	....	....	....	....	.....	6,612,650
Sheridan	1	....	....	1	.....	.....
Sweetwater	1	....	1	....	.....	.....
Washakie	3	1	....	2	35	.....
Weston	17	13	2	2	336	.....
Weston Co., Osage Field	1	....	....	1	.....	.....
Others	....	....	....	....	.....	2,200,400
Totals	51	28	11	12	7,603	12,371,100

Montana

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Big Horn	4	2	2	....	400	.....
Carbon	2	1	....	1	352	.....
Cat Creek	....	....	....	....	.....	229,900
Cut Bank	....	....	....	....	.....	498,950
Glacier	114	97	4	13	12,597	.....
Golden Valley	1	....	....	1	.....	.....
Hill	1	....	....	1	.....	.....
Judith Basin	2	....	....	2	.....	.....
Liberty	4	1	1	2	100	.....
Petroleum	2	....	....	2	.....	.....
Phillips	5	....	5	....	.....	.....
Ponders	2	....	....	2	.....	340,850
Sunburst	....	....	....	....	.....	1,545,800
Teton	2	....	....	2	.....	.....
Toole	38	24	7	7	1,244	.....
Yellowstone	2	....	....	2	.....	.....
Others	....	....	....	....	.....	609,050
Totals	179	125	19	35	14,693	3,224,550

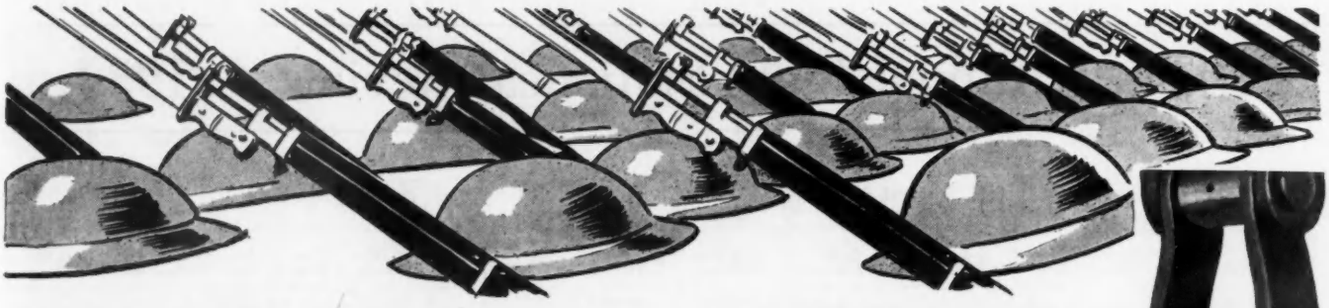
TEXAS

Texas Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Texas Panhandle	463	375	64	24	155,505	20,356,000
North Texas	2,000	1,147	9	844	177,189	20,688,750
West Central Texas	419	178	26	215	7,295	9,783,800
West Texas	583	461	4	118	1,194,456	51,613,700
East Central Texas	196	98	17	81	411,345	17,359,900
East Texas Field	3,762	3,696	6	60	26,097,910	158,370,100
East Texas outside East Texas Field	78	1	7	70	3,000	.....
South Texas	1,387	709	97	581	227,060	18,906,750
Texas Gulf Coast	1,024	642	38	344	454,506	61,049,700
Totals	9,912	7,307	268	2,337	28,728,266	358,128,700

Texas Panhandle

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Carson	34	20	11	3	3,013	1,909,150
Childress	1	....	....	1	.....	.....
Collingsworth	2	....	....	2	.....	.....
Gray	220	201	15	4	73,885	12,293,950
Hutchinson	67	55	9	3	12,963	4,504,200
Moore	8	4	3	1	2,580	327,500
Oldham	1	....	....	1	.....	.....
Wheeler	130	95	26	9	63,064	1,321,200
Totals	463	375	64	24	155,505	20,356,000



HARD · TOUGH *and* STRONG

IT'S DEEPWELL

STRENGTH to carry the load of driving and lifting 8,000 or more feet of drill pipe.

TOUGHNESS to stand the shock loads of reversing under full power.

HARDNESS to resist the abrasive wear of steel meeting steel at high speed. All these qualities are produced by proper selection of alloy steels and further developed by modern, controlled heat treating.

With the Rex Unit Link, the chain rolls smoothly into, and out of, the sprockets. Pins are ground—bushings are ground, inside and out—wear will be slow to start on their smooth, close-fitting surfaces.

THE GREATEST CHAIN THAT EVER HIT THE OIL FIELDS

A Product of **CHAIN BELT COMPANY**

1639 WEST BRUCE STREET, MILWAUKEE, WIS.

ALSO MANUFACTURERS OF REX CHABELCO 1033 • REX CHABELCO 1244

Distributors

MID-CONTINENT AND GULF COAST DISTRIBUTORS

Decker Tool & Supply Co.
Frick-Reid Supply Corp.
Lucey Products Corp.
Murray-Brooks Hardware Co., Ltd.
Norvell-Wilder Supply Company
Rex Supply Compay

CALIFORNIA DISTRIBUTORS—The Republic Supply Co. of Calif.

EXPORT

Chain Belt Co., Chrysler Bldg., New York
Lucey Export Corp., Woolworth Bldg., New York
William E. Knight, 2-3 Norfolk Street, Strand
London, W.C. 2, England

CHAIN BELT COMPANY

REX

DEEPWELL CHABELCO

© C. B. Co., 1934

1934 Annual Field Statistical Review 1934

Texas Gulf Coast

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Arriola Field	12	8	1	3	4,797	[1]329,500
Austin Co. Wildcats	6	....	....	6	.....	.....
Barbers Hill Field	58	48	1	9	23,467	6,880,600
Batson Field	12	8	....	4	92	223,700
Big Creek Field	6	3	....	3	1,278	359,450
Blue Ridge Field	5	3	....	2	475	309,150
Boling Field	4	2	....	2	770	139,750
Brazoria Co. Wildcats	8	....	....	8	.....	.....
Brazos Co. Wildcats	3	....	....	3	.....	.....
Brenham Field	1	....	....	1	.....	.....
Buckeye Field	2	....	....	2	.....	.....
Burleson Co. Wildcats	4	....	....	4	.....	.....
Chambers Co. Wildcats	3	....	....	3	.....	.....
Clay Creek Field	11	7	....	4	2,240	.....
Cleveland Field	6	5	....	1	2,743	.....
Colorado Co. Wildcats	3	....	....	3	.....	.....
Conroe Field	202	181	3	18	252,626	17,253,000
Damon Mound Field	6	5	....	1	1,287	218,400
Danbury Field	4	....	1	3	.....	.....
Dickinson Field	2	2	....	....	170	.....
Esperson Field	8	6	....	2	572	462,350
Eureka Field	1	1	....	....	40	.....
Fannett Field	3	1	....	2	125	195,350
Fayette Co. Wildcats	4	....	....	4	.....	.....
Fort Bend Co. Wildcats	10	1	....	9	15	.....
Galveston Co. Wildcats	3	....	....	3	.....	.....
Garwood Field	1	....	....	1	.....	.....
Goose Creek Field	24	14	....	10	3,793	1,244,300
[2]Greta Field Prod.	.....	.....	.....	.....	.....	3,919,350
Grimes Co. Wildcats	7	....	....	7	.....	.....
Hankamer Field	4	2	....	2	540	369,750
Hardin Co. Wildcats	4	....	....	4	.....	.....
Harris Co. Wildcats	21	....	....	21	.....	.....
High Island Field	16	10	....	6	3,435	2,773,400
Hockley Field	1	....	....	1	.....	.....
Houston Co. Wildcats	7	....	....	7	.....	.....
Hull Field	87	72	....	15	33,113	3,538,400
Humble Field	11	4	....	7	853	1,251,350
Jasper Co. Wildcats	1	....	....	1	.....	.....
Jefferson Co. Wildcats	5	....	....	5	.....	.....
Kittrell Field, Houston Co.	9	3	1	5	2,127	.....
Liberty Co. Wildcats	12	....	....	12	.....	.....
Livingston Field	32	20	....	12	6,938	731,000
Louise Field	13	8	....	5	1,610	.....
Madison Co. Wildcats	3	....	....	3	.....	.....
Manvel Field	46	36	2	8	16,893	1,024,900
Markham Field	8	4	....	4	1,698	405,650
Matagorda Co. Wildcats	6	....	....	6	.....	.....
Montgomery Co. Wildcats	9	....	....	9	.....	.....
Mykawa Field	8	6	....	2	2,558	160,900
Nacagdoches Co. Wildcat	1	....	....	1	.....	.....
Newton Co. Wildcat	1	....	....	1	.....	.....
North Dayton Field	.....	....	....	....	.....	56,550
Old Ocean Field, Brazoria Co.	1	1	....	....	504	.....
Orange Co. Wildcats	2	....	....	2	.....	.....
Orange Field	2	2	....	....	148	294,650
Orchard Field	3	2	....	1	2,060	451,450
[3]Pettus Field Prod.	.....	.....	.....	.....	.....	1,012,100
Pierce Junction Field	19	12	....	7	3,816	1,174,750
Pledger Field	6	....	4	2	.....	.....
Polk Co. Wildcats	8	....	1	7	.....	.....
Port Neches Field	8	4	1	3	1,790	566,600
Raccoon Bend Field	27	17	1	9	15,218	1,492,250
[4]Refugio Field Prod.	.....	.....	.....	.....	.....	1,435,400
San Felipe Dome	3	1	....	2	140	.....
San Jacinto Co. Wildcats	5	....	....	5	.....	.....
Saratoga Field	9	5	2	2	243	276,500
[5]Saxet Field Prod.	.....	.....	.....	.....	.....	710,600
Somerville (Clay Creek)	.....	.....	.....	.....	.....	263,650
Sour Lake Field	13	7	1	5	1,425	457,150
South Liberty Field	7	4	....	3	252	187,950
Spindletop Field	2	2	....	....	730	1,152,150
Splendora Field	2	1	....	1	30	.....
Stratton Ridge Field	2	....	....	2	.....	.....
Sugar Land Field	.....	.....	.....	.....	.....	2,190,300
Thompsons Field	39	32	....	7	22,568	4,223,650
Tomball Field	118	88	19	11	40,517	969,950
Trinity Co. Wildcat	1	....	....	1	.....	.....
Tyler Co. Wildcats	4	....	....	4	.....	.....
Van Vleck Field	2	2	....	....	75	.....
Walker Co. Wildcats	5	....	....	5	.....	.....
Waller Co. Wildcats	2	....	....	2	.....	.....
West Columbia Field	5	2	....	3	735	1,040,200
Wharton Co. Wildcats	5	....	....	5	.....	.....
Others	.....	....	....	....	.....	1,303,600
Totals	1,024	642	38	344	454,506	61,049,700

[1]Arriola production shown with "Others" prior to April 21. [2]Greta field completions listed under South Texas, in Refugio County figure. [3]Pettus field completions listed under Bee county, in South Texas district. [4]Refugio field completions listed with Refugio county under South Texas. [5]Saxet field completions listed with Nueces county, under South Texas.

South Texas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Aransas	1	....	....	1	.....	.....
Atascosa	5	....	....	5	.....	.....
Bandera	1	....	....	1	.....	.....
Bastrop	50	18	....	32	2,719	.....
[1]Bee Co., Drilling	63	31	11	21	9,355	.....
Bexar	62	13	3	46	88	.....
Blanco	2	....	....	2	.....	.....
Brooks	2	....	....	2	.....	.....
Caldwell	21	....	....	21	.....	.....
Calhoun	6	1	....	5	125	.....
Chapman-Abbott	.....	....	....	....	.....	210,300
Comal	1	....	....	1	.....	.....
Dale	.....	....	....	....	.....	277,900
Darst Creek	.....	....	....	....	.....	3,305,500
De Witt	5	....	....	5	.....	.....
Duval	416	326	26	64	122,634	7,538,000
Edwards	3	....	....	3	.....	.....
Frio	4	....	1	3	.....	.....
Goliad	15	9	1	5	1,685	.....
Gonsales	3	....	....	3	.....	.....
Guadalupe	18	3	....	15	90	.....
Hayes	1	....	....	1	.....	.....
Hidalgo	35	21	1	13	22,762	.....
Jackson	10	1	....	9	528	.....
Jim Hogg	18	4	1	13	654	.....
Jim Wells	9	3	....	6	220	.....
Karnes	21	10	3	8	2,432	.....
Kendall	2	....	....	2	.....	.....
Laredo District outside Duval Co.	.....	....	....	....	.....	2,473,900
La Salle	4	....	....	4	.....	.....
Lee	1	....	....	1	.....	.....
Live Oak	38	11	3	24	874	.....
Luling	.....	....	....	....	.....	2,122,450
Lytton Springs	.....	....	....	....	.....	167,950
Maverick	4	....	....	4	.....	.....
McMullen	73	27	3	43	1,462	.....
Medina	6	1	....	5	4	.....
Milam	6	....	....	6	.....	.....
[2]Nueces Co. Drilling	27	14	....	13	2,633	.....
Real	1	....	....	1	.....	.....
[3]Refugio Co. Drilling	154	123	9	22	38,245	.....
Salt Flat	.....	....	....	....	.....	1,617,600
San Patricio	17	5	....	12	441	.....
Somerset	.....	....	....	....	.....	287,600
Starr	43	7	7	29	1,165	.....
Travis	14	3	....	11	202	.....
Uvalde	8	....	....	8	.....	.....
Victoria	34	8	8	18	2,468	.....
Webb	66	32	6	28	14,424	.....
Willacy	1	....	....	1	.....	.....
Williamson	47	15	....	32	1,090	.....
Wilson	7	....	....	7	.....	.....
Zapata	62	23	14	25	760	.....
Others	.....	....	....	....	.....	905,550
Totals	1,387	709	97	581	227,060	18,906,750

[1]Bee County production shown as Pettus, under Texas Gulf Coast. [2]Nueces County production shown as Saxet field, under Texas Gulf Coast. [3]Refugio County production shown under Texas Gulf Coast, as Greta and Refugio Fields.

West Central Texas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Brown	66	19	2	45	528	831,400
Callahan	48	10	3	35	644	615,550
Coleman	42	9	8	25	313	506,150
Comanche	2	1	....	1	13	.....
Eastland Co., Drilling	26	13	5	8	250	.....
Eastland-Desdemona	4	1	....	3	15	1,232,750
Hamilton	1	....	....	1	.....	.....
[1]Jack Co., Production	.....	....	....	....	.....	508,350
Johnson	1	....	....	1	.....	.....
Palo Pinto	18	7	5	6	200	134,750
Parker	5	....	....	5	.....	.....
San Saba	2	....	....	2	.....	.....
Shackelford	193	114	2	77	5,267	1,954,850
Stephens	11	4	1	6	65	2,019,000
Throckmorton	.....	....	....	....	.....	242,200
[2]South Young Co., Production	.....	....	....	....	.....	1,313,200
Others	.....	....	....	....	.....	425,600
Totals	419	178	26	215	7,295	9,783,800

[1]Jack County drilling shown under North Texas. [2]Young County drilling and North Young County production shown under North Texas.

HOW TO REDUCE POWER COSTS

AS MUCH AS 80% ON YOUR ROTARY RIGS

YOU can cut your power costs for drilling by using G-E induction-motor drive. Drilling companies that have changed to this equipment report savings in some cases of as much as 80 per cent in power costs alone with average daily power costs cut to approximately $20. That's real economy!

In addition to this actual power-cost reduction, G-E electric drive offers many other features that will cut your drilling costs, including:

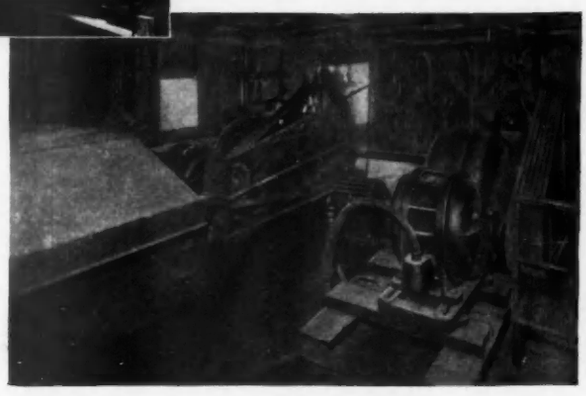
1. **DEPENDABILITY** that reduces shutdowns and costly repairs
2. **PORTABILITY** that cuts moving costs, because there is less material to transport
3. **FLEXIBILITY**—power is immediately available; motors are started and stopped by the throw of a switch
4. **HIGH SALVAGE VALUE,** because of longer life and less-frequent replacements

G-E magnetic control for draw works allows the driller complete speed control and automatically operates to permit maximum starting torque and fast acceleration. Adjustable, definite-time accelerating relays minimize line disturbance and motor heating.

Write or call the nearest G-E sales office to-day. A G-E oil-well specialist will show you, without obligation to you, definite proof of the savings which you can make. General Electric, Schenectady, New York.

OVAL — *G-E 200/65-hp. wound-rotor induction motor driving the draw works on a Santa Barbara, Calif., ocean pier for the Pacific Western Oil Co.*

ABOVE — *This G-E magnetic control for the drilling motor shown above is located in a portable metal house about 100 feet from the derrick*



G-E 75-hp. motor driving a mud pump at the Santa Barbara well, showing steel-skid mounting for easy transportation

020-82

GENERAL ELECTRIC

1934 Annual Field Statistical Review 1934

East Central Texas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Anderson	9	....	....	9	.....	.....
Boggy Creek	....	....	....	....	.....	220,100
Buffalo Field, Leon Co.	1	....	1	....	.....	.....
Cayuga	51	37	12	2	140,350	582,050
Corsicana-Powell	.....	....	....	....	.....	897,650
Currie	....	....	....	....	.....	57,550
Freestone	7	....	1	6	.....	.....
Henderson	10	....	....	10	.....	.....
Hopkins	2	....	....	2	.....	.....
Hunt	5	....	....	5	.....	.....
Leon	2	....	....	2	.....	.....
Limestone	8	....	....	8	.....	.....
Long Lake	5	2	3	....	5,100	.....
Mexia	.....	....	....	....	.....	794,400
Navarro	7	....	....	7	.....	.....
Rains	3	....	....	3	.....	.....
Richland	....	....	....	....	.....	[1]5,200
Richland-Tacoma	....	....	....	....	.....	[1]14,100
Van Field	72	59	....	13	265,895	14,666,700
Van Zandt Co., Wildcats	10	....	....	10	.....	.....
Wood	4	....	....	4	.....	.....
Wortham	.....	....	....	....	.....	36,850
Others	.....	....	....	....	.....	85,300
Totals	196	98	17	81	411,345	17,359,900

[1]Richland production shown under "Richland-Tacoma" after April 21; previously Richland production was considered separately.

East Texas Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
East Texas Field	3,762	3,696	6	60	26,097,910	158,370,100
East Texas outside East Texas Field	78	1	7	70	3,000	.....
Totals	3,840	3,697	13	130	26,100,910	158,370,100

East Texas Field

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Joiner	1,224	1,202	6	16	7,000,880	45,315,200
Kilgore	1,189	1,182	....	7	8,751,070	48,285,750
Longview	1,349	1,312	....	37	10,345,960	64,769,150
Totals	3,762	3,696	6	60	26,097,910	158,370,100

East Texas Outside East Texas Field

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Cass	8	....	1	7	.....	.....
Cherokee	14	1	....	13	3,000	.....
Franklin	2	....	....	2	.....	.....
Harrison	2	....	....	2	.....	.....
Marion	3	....	....	3	.....	.....
Morris	4	....	....	4	.....	.....
Panola Co., Bethany Field	6	....	5	1	.....	.....
Panola Co., Tacoma Field	2	....	....	2	.....	.....
Panola Co., Unclassified	7	....	1	6	.....	.....
Red River	5	....	....	5	.....	.....
Rusk	5	....	....	5	.....	.....
Shelby	3	....	....	3	.....	.....
Smith	8	....	....	8	.....	.....
Upshur	9	....	....	9	.....	.....
Totals	78	1	7	70	3,000	.....

West Texas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Andrews	7	6	....	1	1,425	.....
Borden	1	....	....	1	.....	.....
Concho	1	....	....	1	.....	.....
Crane Co. Drilling	10	5	....	5	1,015	.....
Crane-Upton Prod.	.....	.....	....	....	.....	6,208,700
Crockett	2	....	....	2	.....	259,500
Ector	56	48	....	8	23,660	2,736,350
Fisher Co. Drilling	40	31	....	9	17,437	.....
Gaines	1	....	....	1	.....	.....
Glasscock Co. Drilling	53	46	....	7	39,080	.....
Howard Co. Drilling	53	48	....	5	16,583	.....
Howard-Glasscock Production	.....	....	....	....	.....	5,854,100
Hudspeth	1	....	....	1	.....	.....
Irion	6	2	....	4	55	.....
Jones Co. Drilling	36	16	....	20	2,380	.....
Jones-Fisher Prod.	.....	.....	....	....	.....	2,286,350
Loving	11	10	....	1	1,245	.....
Menard	1	....	....	1	.....	.....
McCulloch	1	....	....	1	.....	.....
Mitchell Co., Iatan Field	2	2	....	....	420	.....
Mitchell Co., Unclassified	1	1	....	....	100	.....
Mitchell-Scurry Prod.	.....	.....	....	....	.....	467,950
Pecos Co., Unclassified	18	10	....	8	1,150	.....
Pecos Co., Taylor-Link Field	1	1	....	....	125	.....
Pecos Co., Yates Field	47	41	....	6	1,009,215	15,499,100
Pecos Co. Production outside Yates Field	.....	....	....	....	.....	884,750
Reagan Co., Unclassified	2	....	....	2	.....	4,572,200
Reagan Co., Big Lake Field	6	4	....	2	2,865	.....
Reaves	3	....	....	3	.....	.....
Runnels	21	14	....	7	16,580	.....
Scurry	3	1	....	2	30	.....
Sterling	2	....	....	2	.....	.....
Taylor	5	1	....	4	40	.....
Tom Green	2	....	....	2	.....	.....
Upton Co. Drilling	18	17	....	1	6,315	.....
Ward	125	113	1	11	44,676	3,627,750
Winkler	36	34	2	....	8,060	7,685,850
Winkler Co., Scarborough Field	11	10	1	....	2,000	.....
Others	.....	....	....	....	.....	1,531,100
Totals	583	461	4	118	1,194,456	51,613,700

North Texas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Archer	1,008	698	....	310	125,390	6,879,400
Baylor	7	3	....	4	210	.....
Burkburnett	.....	.....	....	....	.....	1,955,200
Clay	25	8	....	17	111	.....
Cooke Co. Drilling	30	11	1	18	1,834	.....
Denton	2	....	....	2	.....	.....
Electra	.....	.....	....	....	.....	2,798,950
Fannin	1	....	....	1	.....	.....
Foard	4	4	....	....	6,770	.....
Grayson	6	....	....	6	.....	.....
Iowa Park & K. M. A.	.....	.....	....	....	.....	831,450
[1]Jack Co. Drilling	97	22	2	73	2,005	.....
Montague Co. Drilling	69	42	2	25	9,918	.....
Montague-Cooke Production	1	1	....	....	250	2,235,500
Throckmorton	18	2	2	14	28	.....
Wichita	203	90	1	112	4,489	.....
Wilbarger	96	61	1	34	11,749	3,061,550
Wise	4	....	....	4	.....	.....
[2]Young Co., Drilling	429	205	....	224	14,435	.....
[2]Young Co., North, Production	.....	....	....	....	.....	2,268,150
Others	.....	....	....	....	.....	658,550
Totals	2,000	1,147	9	844	177,189	20,688,750

[1]Jack County production shown under West Central Texas. [2]South Young County production shown under West Central Texas.

FOR MAXIMUM SAFETY and ECONOMY SPECIFY

McEVOY BOTTOM HOLE EQUIPMENT

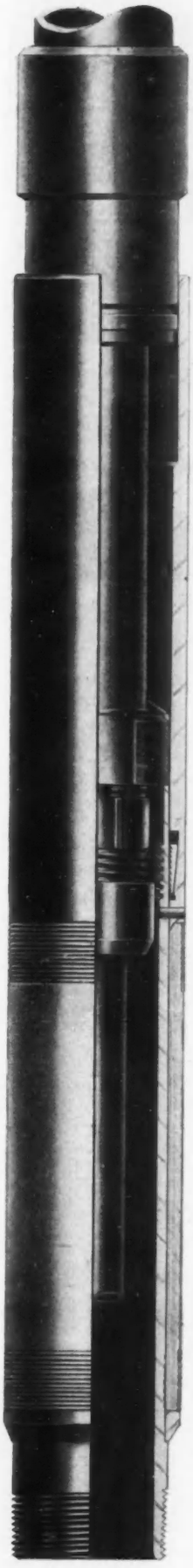


FIGURE 12

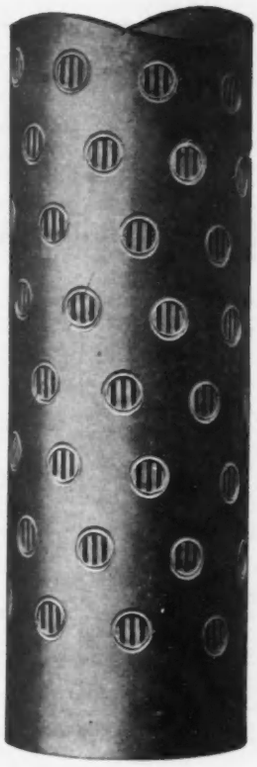


FIGURE 1

McEvoy Improved Wireless Well Strainer (See Figure 1).

Tests conclusively show that:

1. External pressure will collapse pipe before causing failure of buttons.
2. Always reaches bottom of hole in perfect condition.

●

McEvoy Packer and Setting Tool (See Figure 12).

1. **Positive, effective** and **permanent** seal.
2. Setting tool is totally disconnected before compression of packer is possible.

●

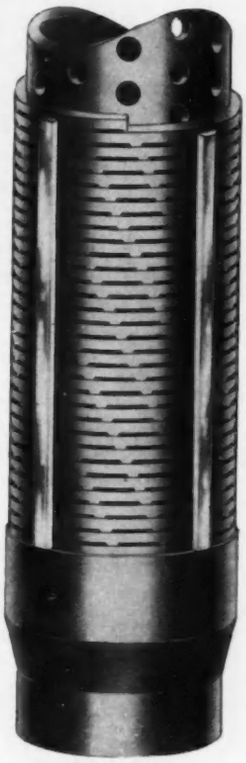


FIGURE 5

McEvoy Preformed Wire Strainer (See Figure 5).

1. Greatest advance in wire screen design in a decade.
2. Wire grips pipe instead of constantly tending to uncoil, thereby greatly increasing screen life and effectiveness.

●

McEvoy Quadruple-Seal Set Shoe—Inserted Type (See Figure 9).

1. Positive closure of set shoe.
2. Automatically closed when wash pipe removed.
3. Permits screening of maximum amount of oil sand; screen surface close to the bottom of the hole.

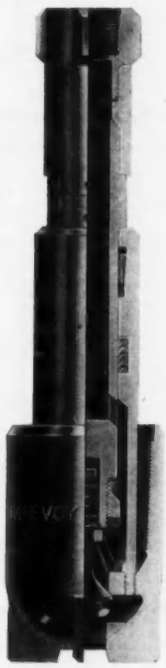


FIGURE 9

For complete description of these and many other McEvoy products for use during drilling and surface well completion equipment . . . See 1935 COMPOSITE CATALOG

●

McEvoy Type "B" Set Shoe — Inserted Type (See Figure 8).

1. Standard double valve set shoe. Special exclusive McEvoy welded-in guide, permitting screening surface within approximately 4 inches of the bottom of the hole, is available with our bottom hole completion assembly.

●

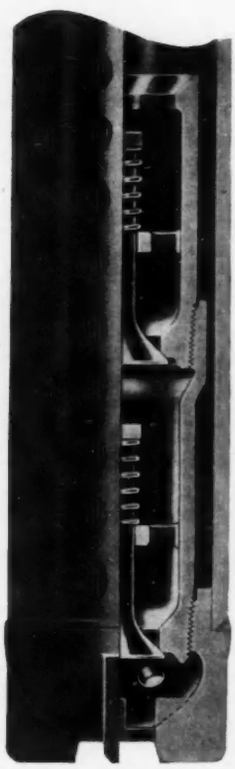


FIGURE 8

Established 1906

J. H. McEVOY & CO.

TEXAS AVE. AT MILBY ST.

HOUSTON, TEXAS

LOUISIANA

Louisiana Summary

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
North Louisiana	403	147	75	181	14,543	9,271,500
Louisiana Gulf Coast	398	253	3	142	181,478	23,301,400
Totals	801	400	78	323	196,021	32,572,900

Louisiana Gulf Coast

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Acadia Parish Wildcats	3	....	....	3	.....	.....
Allen Parish Wildcats	1	....	....	1	.....	.....
Avoyelles Parish Wildcats	2	....	....	2	.....	.....
Bay St. Elaine Field	4	1	....	3	30	.....
Beauregard Parish Wildcats	6	....	....	6	.....	.....
Black Bayou Field	5	4	....	1	1,391	426,700
Bosco Field	27	20	....	7	17,546	962,000
Caillou Island Field	7	6	....	1	11,934	1,343,900
Calcasieu Parish Wildcats	3	....	....	3	.....	.....
Calcasieu Lake Dome	2	....	....	2	.....	.....
Cameron Parish Wildcat	1	....	....	1	.....	.....
Cameron Meadows Field	12	9	....	3	3,677	.....
Choctaw Field	4	3	....	1	3,061	.....
Darrow	2	....	....	2	.....	.....
Dog Lake Dome	4	....	....	4	.....	.....
East Bay Junop Dome	2	....	....	2	.....	.....
East Hackberry Field	14	10	1	3	4,705	1,692,450
Edgerly Field	8	4	....	4	3,210	58,050
Evangeline Parish Wildcat	1	....	....	1	.....	.....
Four Isle Field	3	1	....	2	2,230	.....
Garden Island Bay Dome	4	....	1	3	.....	.....
Gillis Field	2	2	....	....	1,608	.....
Gueydan Field	1	....	....	1	.....	113,850
Hackberry Field	6	3	....	3	615	193,800
Iberia Parish Wildcats	2	....	....	2	.....	.....
Iowa Field	41	37	....	4	33,261	5,257,150
Jefferson Davis Parish Wildcats	3	....	....	3	.....	.....
Jennings Field	9	9	....	....	1,016	454,000
LaFourche Parish Wildcat	1	....	....	1	.....	.....
Lake Barre Field	13	6	....	7	9,955	1,791,400
Lake Hermitage Dome	1	1	....	....	3	.....
Lake Pelto Dome	1	....	....	1	.....	.....
Lake Washington Field	4	1	....	3	384	.....
La Rose Dome	1	....	....	1	.....	.....
Leesville Field	74	63	....	11	56,032	4,358,300
Lockport Field	18	13	....	5	3,459	709,600
New Iberia Field	4	1	....	3	720	.....
Plaquemines Parish Wildcat	1	....	....	1	.....	.....
Port Barre Field	16	13	....	3	8,452	989,900
Rapides Parish Wildcats	4	....	....	4	.....	.....
Roanoke Field	3	2	1	....	1,920	.....
Sorrento Field	2	....	....	2	.....	.....
St. Bernard Parish Wildcats	3	....	....	3	.....	.....
St. Landry Parish Wildcats	3	....	....	3	.....	.....
St. Martin Parish Wildcats	2	....	....	2	.....	.....
Starks Field	6	2	....	4	1,015	.....
Sulphur Field	25	21	....	4	11,872	1,281,950
Vermilion Parish Wildcats	2	....	....	2	.....	.....
Vernon Parish Wildcats	2	....	....	2	.....	.....
Vinton Field	30	21	....	9	3,382	1,182,750
Welsh Field	1	....	....	1	.....	.....
White Castle Field	2	....	....	2	.....	198,200
Others	.....	....	....	....	.....	2,287,400
Totals	398	253	3	142	181,478	23,301,400

North Louisiana

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Bienville Parish Wildcats	4	....	....	4	.....	.....
Bossier Parish, Antrim Area	1	....	....	1	.....	.....
Bossier Parish, Bellevue Field	16	11	....	5	145	.....
Bossier Parish, Shreveport Area	2	....	....	2	.....	.....
Bossier Parish, Sligo Field	5	....	5	....	.....	.....
Bossier Parish, Wistar District	3	2	....	1	85	.....
Bossier Parish, Unclassified Wildcats	8	....	....	8	.....	.....
Caddo Parish, Blanchard Area	32	2	19	11	24	.....
Caddo Parish, Caddo Field Drilling	9	5	3	1	197	.....
Caddo Parish, Dixie Field	1	....	....	1	.....	.....
Caddo Parish, Greenwood Area	1	....	....	1	.....	.....
Caddo Parish, Pine Island Field	7	4	1	2	108	.....
Caddo Parish, Reiser Area	2	....	....	2	.....	.....
Caddo Parish, Rodessa Field	6	....	6	....	.....	.....
Caddo Parish, Vivian Field	6	3	....	3	26	.....
Caddo Parish, Unclassified Wildcats	11	1	3	7	8	.....
Caddo Field, Light Production	.....	....	....	....	.....	1,671,750
Caddo Field, Heavy Production	.....	....	....	....	.....	574,500
Caldwell Parish Wildcats	2	....	....	2	.....	.....
Claiborne Parish Wildcat	1	....	....	1	.....	.....
Claiborne Parish, Haynesville Field Drilling	1	1	....	....	31	.....
Claiborne Parish, Sugar Creek Area	1	....	1	....	.....	.....
Converse Field	.....	....	....	....	.....	433,450
Cotton Valley Field	.....	....	....	....	.....	191,100
DeSoto Parish, Logansport Area	1	....	....	1	.....	.....
DeSoto Parish, Naborton Field	13	3	2	8	111	.....
DeSoto Parish, Spider Field	1	....	....	1	.....	.....
DeSoto Parish, Unclassified Wildcats	9	....	....	9	.....	.....
DeSoto and Red River Parishes Production	.....	....	....	....	.....	545,600
East Carroll Parish Wildcats	3	....	1	2	.....	.....
Grant Parish Wildcat	1	....	....	1	.....	.....
Haynesville Field	.....	....	....	....	.....	1,371,350
Holly Field	.....	....	....	....	.....	66,000
Homer Field	.....	....	....	....	.....	967,650
Jackson Parish Wildcat	1	....	....	1	.....	.....
La Salle Parish, Urania Field Drilling	1	1	....	....	20	.....
Lincoln Parish Wildcats	2	....	....	2	.....	.....
Morehouse Parish, Monroe Field	7	....	5	2	.....	.....
Natchitoches Parish, Wildcats	5	....	....	5	.....	.....
Ouachita Parish, Monroe Field	20	....	20	....	.....	.....
Ouachita Parish, Unclassified Wildcats	4	....	2	2	.....	.....
Red River Parish Wildcats	6	....	....	6	.....	.....
Red River Parish, Naborton Field	4	2	....	2	55	.....
Richland Parish Wildcat	1	....	1	....	.....	.....
Sabine Parish, Ayers Field	1	....	....	1	.....	.....
Sabine Parish, Converse Field	104	73	1	30	5,713	.....
Sabine Parish, Pleasant Hill Field	1	....	....	1	.....	.....
Sabine Parish, Robeline Area	1	....	....	1	.....	.....
Sabine Parish, Spring Ridge Field	2	....	....	2	.....	.....
Sabine Parish, Zwolle Field Drilling	74	38	....	36	7,970	.....
Sabine Parish, Unclassified Wildcat	1	....	....	1	.....	.....
Sarepta-Carterville Field Production	.....	....	....	....	.....	257,200
Tensas Parish Wildcat	1	....	....	1	.....	.....

APPLEMAN
PATENTED GUMBO BIT

THIS BIT MUST BE SUPERIOR

OR IT WOULD NOT BE SO WIDELY COPIED

No drilling tool of like nature has been so widely copied by infringing manufacturers who, recognizing its advantages, seek to appropriate them without recompensing the patentee.

However, the many valuable claims contained in the United States Patent Number 1,882,268 have been so unassailable after legal investigation that said manufacturers are having to discontinue their piratical practice.

AN INVITATION AND A PROTECTION

To protect manufacturers who recognize the marked superiority of the Appleman Bits, and so that they will not be tied up with bits they have no legal right to make . . . an invitation is extended to manufacturers to make and sell them on a most reasonable royalty basis.

Figure No. 1

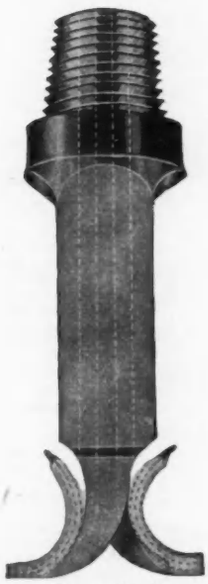


Figure No. 2

WHY APPLEMAN BITS SAVE

ONE-THIRD DRILLING TIME AND EXPENSE OF AN ENTIRE WELL

1. Will not choke by accumulating masses of gumbo or other adhesive material on blades, because the stream of flush water is forced behind the chips.
2. Water courses lead direct to the cutting edge, rapidly carrying cuttings away in solution.
3. The only bit that drills and cleans the well in a single operation, thereby saving the time otherwise lost in spudding.
4. Has twice the cutting capacity of other bits.
5. The only bit that under-cuts and lifts its chips, (see Figure No. 2) thus preventing them from reforming in mass at the bottom of the well.
6. When pointed with latest diamond substitutes, makes an excellent showing in rock, thus saving many changes of bits.
7. **IMPORTANT.** The time required for changing bits averages around sixty minutes for each thousand feet. Therefore a saving of fully 40% of the time lost in changing bits is saved because fewer Appleman Bits are required.

THE APPLEMAN GUMBO BIT CAN Be OBTAINED FROM THE FOLLOWING LICENSEES:

BEAUMONT IRON WORKS CO.
Beaumont, Texas, 1450 Crockett.
GULF COAST MACHINE & SUPPLY CO.
Beaumont, Texas, 305 Orange.
BEAUMONT WELL WORKS COMPANY
Beaumont, Texas, 1055 Archie.
OIL CITY BRASS WORKS CO.
Beaumont, Texas, 326 Neches.
AUTHORIZED APPLEMAN BIT SERVICE CO.
Houston, Texas, 1945 St. Bernard St.
THE TEXAS IRON WORKS
Houston, Texas, 1401 Maury.
AMERICAN IRON & MACHINE WORKS
Oklahoma City, Okla., 518 N. Indiana Ave.
Houston, Texas, 2205 Quitman.
THE WHELAND COMPANY
Chattanooga, Tenn.

B. K. APPLEMAN
BEAUMONT, TEXAS

Patent Owner

1934 Annual Field Statistical Review 1934

North Louisiana (Continued)

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Union Parish, Monroe Field	5	....	5	....	.....	.....
Union Parish, Unclassified Wildcats	2	....	....	2	.....	.....
Urania Field	....	....	....	....	.....	1,122,400
Webster Parish, Unclassified Wildcats	8	....	....	8	.....	.....
Webster Parish, Cartersville Field Drilling	1	1	....	....	50	.....
Winn Parish Wildcats	4	....	....	4	.....	.....
Zwolle Field Production	....	....	....	....	.....	1,688,650
Others	....	....	....	....	.....	381,850
Totals	403	147	75	181	14,543	9,271,500

New Mexico

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Chaves	2	....	....	2	.....	.....
DeBaca	1	....	....	1	.....	.....
Dona Ana	1	....	....	1	.....	.....
Eddy Co., Artesia Field	6	3	....	3	105	210,600
Eddy Co. Prod. outside Artesia Field	....	....	....	....	.....	210,050
Eddy Co., Unclassified	17	4	3	10	250	.....
Guadalupe	1	....	....	1	.....	.....
Hogback	1	1	....	....	355	72,650
Lea Co., Cooper Field	23	21	1	1	91,975	.....
Lea Co., Eunice Field	19	19	....	....	28,890	.....
Lea Co., Hobbs Field	14	14	....	....	79,102	12,519,700
Lea Co. Prod. outside Hobbs Field	....	....	....	....	.....	3,215,300
Lea Co., Jal Field	5	5	....	....	5,955	.....
Lea Co., Maljamar Field	1	1	....	....	50	.....
Lea Co., North Jal Field	1	1	....	....	900	.....
Lea Co. North Lea Field	1	1	....	....	100	.....
Lea Co., South Jal Field	1	1	....	....	2,085	.....
Lea Co., Unclassified Wildcats	22	20	2	....	55,235	.....
McKinley	1	1	....	....	5	.....
Rattlesnake	....	....	....	....	.....	265,650
San Juan	10	8	....	2	333	.....
Table Mesa	....	....	....	....	.....	35,100
Torrance	2	....	1	1	.....	.....
Totals	129	100	7	22	265,340	16,529,050

OTHER STATES

Kansas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Augusta-Fox-Bush	....	....	....	....	.....	[1]943,350
Barber	2	1	....	1	140	.....
Barton	18	8	....	10	3,672	.....
Butler	62	34	2	26	2,902	.....
Burrton-Haury	....	....	....	....	.....	660,150
Chase	8	6	....	2	624	1,684,900
Chautauqua	7	4	1	2	227	.....
Churchill	....	....	....	....	.....	[2]371,700
Clay	1	....	....	1	.....	.....
Coffey	4	3	....	1	21	.....
Cowley	30	9	3	18	1,098	.....
Edwards	1	....	....	1	.....	.....
Elbing	....	....	....	....	.....	167,900
El Dorado-Towanda	....	....	....	....	.....	4,321,200
Elk	24	19	1	4	660	.....
Ellis	11	10	....	1	1,993	.....
Ellsworth	22	14	1	7	6,294	.....
Finney	1	....	....	1	.....	.....
Florence-Covert	....	....	....	....	.....	[3]102,100
Greenwood	76	41	1	34	2,166	4,389,150
Harper	1	....	....	1	.....	.....
Harvey	69	65	....	4	41,592	.....
Hollow	....	....	....	....	.....	3,385,800
Kingman	13	9	....	4	3,999	.....
Lyon	1	....	....	1	.....	.....
Marian	4	1	....	3	127	.....
McPherson	182	136	1	45	64,431	.....
Morris	2	....	1	1	.....	.....
Nikkel	....	....	....	....	.....	1,970,500
Oxford	....	....	....	....	.....	[4]304,100
Peabody-Elbing	....	....	....	....	.....	[5]323,200
Phillips	2	....	....	2	.....	.....
Rainbow Bend	....	....	....	....	.....	402,400
Raymond	....	....	....	....	.....	773,500
Reno	80	65	2	13	80,988	.....
Rice	122	88	4	30	71,514	.....
Ritz-Canton	....	....	....	....	.....	4,726,150
Rooks	4	4	....	....	511	.....
Rush	10	3	4	3	198	.....
Russell	52	42	....	10	24,449	2,592,650
Saline	1	....	....	1	.....	.....
Sedgwick	59	40	....	19	12,823	2,642,700
Stafford	17	9	....	8	5,713	.....
Sumner	7	2	....	5	185	.....
Trego	1	1	....	....	120	.....
Voshell	....	....	....	....	.....	2,449,050
Woodson	32	18	....	14	643	.....
Others	....	....	....	....	.....	13,366,050
Totals	926	632	21	273	327,090	45,577,050

[1]Only Augusta after September 1. [2]Included with "Others" after November 3. [3]Dropped after August 4, and included with "Others." [4]Included with "Others" after November 3. [5]Peabody included with "Others" after August 4; and Elbing then shown separately.

Arkansas

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Ashley	1	....	....	1	.....	.....
Bradley	1	....	....	1	.....	.....
Calhoun	2	....	....	2	.....	.....
Champagnolle	....	....	....	....	.....	516,300
Columbia	3	....	....	3	.....	.....
Columbia Co., Stephens Field Drilling	1	1	....	....	15	.....
Conway	1	....	....	1	.....	.....
El Dorado	....	....	....	....	.....	886,200
Franklin	1	....	1	....	.....	.....
Hempstead	2	....	....	2	.....	.....
Jefferson	2	....	....	2	.....	.....
Lafayette	8	....	....	8	.....	.....
Lee	1	....	....	1	.....	.....
Lisbon	....	....	....	....	.....	135,050
Little River	1	....	....	1	.....	.....
Lonoke	1	....	....	1	.....	.....
Miller Co., Garland City Field	7	6	....	1	1,345	.....
Miller Co., Unclassified	18	7	....	11	1,190	.....
Nevada	....	....	....	....	.....	298,850
Nevada Co., Stephens Field Drilling	1	1	....	....	15	.....
Ouachita Co., Unclassified	6	1	....	5	20	.....
Ouachita Co., Smackover Field Drilling	2	1	....	1	10	.....
Ouachita Co., Stephens Field Drilling	1	1	....	....	10	.....
Smackover Field, Light Production	....	....	....	....	.....	877,400
Smackover Field, Heavy Production	....	....	....	....	.....	7,178,050
Stephens Field Prod.	....	....	....	....	.....	225,950
St. Francis	1	....	....	1	.....	.....
Union	16	6	....	10	570	.....
Union Co., Rainbow City Field	8	6	....	2	5,125	.....
Union Co., Smackover Field	1	1	....	....	35	.....
Union Co., Urbana Field	5	4	....	1	310	.....
Woodruff	2	....	....	2	.....	.....
Others	....	....	....	....	.....	1,294,300
Totals	93	35	1	57	8,645	11,412,100

When all

STATISTICS *and* COST FACTORS

are taken into consideration by executives who get right down to facts before making decisions

Electric Power

is proven to be the most flexible, economical, and safe.

The services of our engineers are available at all times to oil executives who want information on the advantages of using electric power in the producing, pipe line, or refining branches of the oil industry.

GULF STATES
UTILITIES COMPANY

General Offices

BEAUMONT, TEXAS **LAKE CHARLES, LA.**

1934 Annual Field Statistical Review 1934

Oklahoma

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	Total Bbls. Oil Prod.
Allen	.....	.....	.....	.....	.....	2,975,400
Asher	.....	.....	.....	.....	.....	153,350
West Asher	.....	.....	.....	.....	.....	510,950
Atoka	9	1	.....	8	23	.....
Beckham	3	.....	1	2	.....	.....
Blackwell District	.....	.....	.....	.....	.....	1,786,000
Bowlegs	.....	.....	.....	.....	.....	3,755,500
Bristow-Slick	.....	.....	.....	.....	.....	3,771,650
Burbank	.....	.....	.....	.....	.....	3,605,850
South Burbank	.....	.....	.....	.....	.....	[1]1,985,300
Caddo	4	.....	1	3	.....	.....
Carr City	.....	.....	.....	.....	.....	2,026,550
Carter	77	52	4	21	5,691	.....
Chandler	.....	.....	.....	.....	.....	2,030,750
Cleveland	3	.....	.....	3	.....	.....
Coal	3	.....	.....	3	.....	.....
Comanche	7	2	.....	5	6	.....
Cotton	3	.....	.....	3	.....	.....
Creek	238	157	8	73	12,273	.....
Crescent	.....	.....	.....	.....	.....	1,273,350
Cromwell	.....	.....	.....	.....	.....	1,702,800
Cushing-Shamrock	.....	.....	.....	.....	.....	5,010,500
Davenport	.....	.....	.....	.....	.....	270,150
Dewey	1	.....	.....	1	.....	.....
Duncan District	.....	.....	.....	.....	.....	1,637,700
Earlsboro	.....	.....	.....	.....	.....	3,389,600
East Earlsboro	.....	.....	.....	.....	.....	3,778,200
South Earlsboro	.....	.....	.....	.....	.....	401,950
Fish	.....	.....	.....	.....	.....	1,379,650
Fitts	.....	.....	.....	.....	.....	186,350
Garfield	10	5	1	4	144	.....
Garvin	6	1	.....	5	12	.....
Grady	7	2	2	3	107	.....
Graham	.....	.....	.....	.....	.....	1,308,200
Grant	1	.....	.....	1	.....	.....
Gray	.....	.....	.....	.....	.....	806,000
Greer	1	.....	.....	1	.....	.....
Harper	1	.....	.....	1	.....	.....
Healdton	.....	.....	.....	.....	.....	3,371,600
Hewitt	.....	.....	.....	.....	.....	1,805,000
Holdenville	.....	.....	.....	.....	.....	1,155,200
Hughes	69	47	2	20	4,078	.....
Jackson	5	.....	.....	5	.....	.....
Jefferson	30	21	.....	9	793	.....
Johnston	2	.....	.....	2	.....	.....
Kay	5	2	1	2	135	.....
Keokuk	.....	.....	.....	.....	.....	477,000
Kingfisher	1	.....	.....	1	.....	.....
Kiowa	6	.....	.....	6	.....	.....
Konawa	.....	.....	.....	.....	.....	809,100
West Konawa	.....	.....	.....	.....	.....	[2]15,000
Latimer	1	.....	.....	1	.....	.....
Lincoln	67	52	.....	15	54,399	.....
Little River	.....	.....	.....	.....	.....	4,994,800
East Little River	.....	.....	.....	.....	.....	263,950
Logan	31	23	3	5	63,327	[3]6,600
Lucien	.....	.....	.....	.....	.....	2,817,350
Marshall	38	26	.....	12	614	.....
Marshall-Lovell	2	2	.....	.....	20	408,700
Maud	.....	.....	.....	.....	.....	450,050
McClain	3	.....	.....	3	.....	.....
McCurtain	1	.....	.....	1	.....	.....
McIntosh	3	.....	2	1	.....	.....
Mission	.....	.....	.....	.....	.....	1,290,000
Murray	3	.....	.....	3	.....	.....
Muskogee	36	9	2	25	214	.....
Noble	61	54	.....	7	159,954	.....
Okfuskee	47	22	8	17	1,919	.....
Oklahoma City Field	.....	.....	.....	.....	.....	60,014,250
Oklahoma County	77	63	1	13	285,922	.....
Okmulgee	138	65	19	54	3,153	.....
Osage	331	255	5	71	152,369	.....
Osage outside Burbank	.....	.....	.....	.....	.....	9,044,750
Papoose	.....	.....	.....	.....	.....	480,300
Pawnee	12	3	.....	9	260	.....
Payne	8	5	1	2	1,026	.....
Pittsburg	10	.....	5	5	.....	.....
Pontotoc	122	69	9	44	128,187	.....
Pottawatomie	145	117	1	27	54,261	.....
Sasakwa	.....	.....	.....	.....	.....	353,050
Sasakwa Townsite	.....	.....	.....	.....	.....	480,500
St. Louis-Pearson	.....	.....	.....	.....	.....	7,903,550
Scholem-Alechem	.....	.....	.....	.....	.....	1,607,700
Searight	.....	.....	.....	.....	.....	928,500
Seminole Field	5	4	.....	1	2,271	3,805,850
Seminole County	118	88	3	27	56,239	.....
East Seminole	.....	.....	.....	.....	.....	414,050
Stephens	75	43	3	29	945	.....
Tatums	.....	.....	.....	.....	.....	2,458,850
Tonkawa-Thomas	.....	.....	.....	.....	.....	2,407,500
Tulsa	61	20	6	35	1,005	.....
Wagoner	38	12	7	19	580	.....
Wewoka	.....	.....	.....	.....	.....	1,629,350
Yale-Jennings	.....	.....	.....	.....	.....	1,828,500
Others	.....	.....	.....	.....	.....	21,539,750
Totals	1,925	1,222	95	608	989,927	176,506,550

[1]Production prior to April 8 included with "Others." [2]West Konowa included with "Others" after January 6. [3]Logan County production included with "Others" after January 6.

California

COUNTY OR FIELD	Completions	Oil Wells	Gas Wells	Failures	Initial Oil Production	*Total Bbls. Oil Prod.
Belridge, North	6	5	.....	1	23,433	2,184,202
Belridge, South	.....	.....	.....	.....	.....	720,388
Brea-Olinda (Fullerton)	4	3	.....	1	2,400	3,753,941
Buttonwillow (Gas)	.....	.....	.....	.....	.....	.....
Capitan	5	5	.....	.....	1,837	191,757
Coalinga	2	1	.....	1	55	6,644,817
Coyote, East	4	3	.....	1	175	1,116,167
Coyote, West	9	9	.....	.....	4,078	3,030,074
Dominguez	33	29	.....	4	20,550	6,652,776
Dudley Ridge (Gas)	3	.....	.....	3	.....	.....
Edison	15	10	.....	5	3,163	120,770
Elk Hills	.....	.....	.....	.....	.....	3,354,616
Elwood	8	8	.....	.....	8,741	4,108,496
Fruitvale	12	8	.....	4	4,960	1,348,413
Huntington Beach	41	30	.....	11	31,812	15,129,286
Inglewood	12	9	.....	3	11,651	3,380,997
Kern River	5	5	.....	.....	681	3,727,513
Kettleman Hills: Middle Dome	1	1	.....	.....	1,250	131,332
Kettleman Hills: North Dome	41	40	.....	1	284,596	21,264,839
Lawndale	.....	.....	.....	.....	.....	53,738
Long Beach	104	86	.....	18	20,769	23,101,099
Los Angeles-Salt Lake	.....	.....	.....	.....	.....	289,300
Lost Hills	.....	.....	.....	.....	.....	1,469,708
McKittrick	4	2	.....	2	194	1,100,229
Midway-Sunset	12	10	.....	2	5,940	19,729,757
Montebello	9	8	.....	1	2,379	1,979,520
Mountain View	56	50	.....	6	72,843	2,615,360
Mount Poso	54	44	.....	10	23,729	3,455,933
Playa Del Rey	10	7	.....	3	8,986	3,195,240
Potrero	1	.....	.....	1	.....	150,340
Richfield	8	.....	.....	8	.....	2,931,281
Rincon	3	1	.....	2	24	543,548
Rosecrans	6	.....	.....	6	.....	1,040,392
Round Mountain	5	3	.....	2	870	1,823,810
San Miguelita	1	.....	.....	1	.....	268,225
Santa Barbara	43	43	.....	.....	35,593	607,231
Santa Fe Springs	22	16	.....	6	2,482	14,726,910
Santa Maria	11	4	.....	7	350	1,814,075
Seal Beach	2	1	.....	1	65	3,515,242
Summerland	1	.....	1	.....	.....	20,765
Torrance	2	.....	.....	2	.....	2,529,748
Ventura Avenue	9	8	.....	1	11,733	9,881,152
Ventura-Newhall	24	6	.....	18	295	1,402,098
Watsonville	.....	.....	.....	.....	.....	22,040
Wheeler Ridge	.....	.....	.....	.....	.....	156,512
Whittier	.....	.....	.....	.....	.....	394,725
Miscellaneous Drilling (Wildcats)	87	.....	.....	87	.....	.....
Totals	675	455	1	219	585,634	175,678,362

*Actual production for first 11 months; estimated for December

105,669 Tank Cars Moved From East Texas Last Year

Tyler, Texas.—Summary of petroleum products shipped via rail from the East Texas field during 1934 reveals that 105,669 cars were moved by the four railroads serving the district. These car loadings involved an estimated total of 21,941,727 barrels, or 921,552,534 gallons of miscellaneous products. Shipments approached the one billion gallon mark even though interstate movement of untendered products were cut off after October 25, and intrastate consignments without tenders dropped off to a low level one month later.

Gasoline was the principal commodity moved via rail during the year, with shipments aggregating 37,384 cars, involving an estimated total of 311,496,024 gallons. A quantity purchased by majors was moved from the district in batches through crude trunk lines. Fuel oil shipments were reported to involve an estimated total of 6,282,932 barrels in 28,481 cars, while topped crude ranked third in movement, with a total of 15,339 cars containing approximately 3,335,941 barrels.

Rail shipments of all grades of petroleum products reached a weekly peak for the year when 3661 cars, containing 31,529,693 gallons, were moved during the seven-day period ending October 28.

MEN IN THE INDUSTRY'S NEWS

(*Continued from Page 16*)

G. CARL HIPPLE, independent oil operator, was recently elected to his third straight and his fourth term as president of the Hutchinson, Kansas, Chamber of Commerce.

E. G. WOODRUFF, pioneer Mid-Continent consulting geologist, and **R. L. Ginter,** petroleum chemical engineer of Tulsa, were guests speakers before the Tulsa Geological Society in a meeting held on Monday evening, January 21. Woodruff discussed, "Asphalt and Its Relation to Oil" and Ginter, "Asphaltites and Asphaltic Pyrobitumens and Their Formation."

GERALD SMITH, worker in the Government Wells field, Duval County, was injured in a fall from a derrick on a drilling well. He is at the Nix Hospital in San Antonio.

RAYMOND R. RUSSELL is head of Oriental Oil Company, of San Antonio, which has been formed for merchandising of refined oil at wholesale. W. L. Rodgers and W. I. Lightfoot also are in the organization.

L. H. McBEE, scout with Sun Oil Company at Tyler, has been transferred to the San Antonio office. The company is continuing to enlarge its South Texas force.

J. E. OWEN, production engineer in the Healdton, Oklahoma district for Shell Petroleum Corporation, has been transferred temporarily to Mid-Continent headquarters in Tulsa.

CARL W. DILLON, formerly chief inspector in the Gary, Indiana works of National Tube Company, has been transferred to Tulsa to act as field service engineer under J. B. Graham, Pittsburgh, Pa.

P. BARNEY FLYNN, independent operator of Wichita, Falls, Texas and formerly head of the North Texas Oil and Gas Association, was a Tulsa visitor during the week.

E. F. JONES, independent operator of Chase, Kansas, has purchased the Chase refinery of Security Petroleum Company of Kansas City. The refinery was sold under a trusteeship arrangement in a bankruptcy proceedings. Jones' bid was $6300. The new owner did not announce when operations would be resumed.

HARRY SCHUETZ, assistant to the vice president of the Colona division, Pittsburgh Screw and Bolt Company, spent several days in Tulsa on a trip through the Mid-Continent oil centers.

DIED

GEORGE A. SPANG, 66, president, Spang and Company, Butler, Pennsylvania, died at his home near Butler, January 22 after four months illness. Mr. Spang had spent the greater part of his life as a manufacturer of oil field equipment, much of which was of his own invention.

CHARLES W. DUKE, 44, chief gauger for Sinclair Refining Company, died suddenly in his home in Tulsa on Monday, January 21, following a heart attack. Duke came to Tulsa from Blackwell, Oklahoma in 1919 to become superintendent of pipe line for Producers and Refiners Corporation. He held that position until last summer when the company was merged with the Sinclair companies.

F. E. Wood Heads A.P.I. 1935 Practice Committee

New York.—Announcement has been made of the selection of F. E. Wood, of Standard Oil Company (Indiana), Chicago, Ill., as national chairman of the American Petroleum Institute's Central Committee on Drilling and Production Practice for 1935.

Other national officers include T. V. Moore, Humble Oil & Refining Company, Houston, Texas, vice-chairman, and Carl A. Young, secretary of the Institute's Division of Production, Dallas, Texas, secretary.

The following have been appointed national chairman of topical committees:

Drilling practice, W. T. Doherty, Humble Oil & Refining Company, Houston; production practice, D. R. Knowlton, Phillips Petroleum Company, Bartlesville, Oklahoma; allocation of production, Mr. Wood; metallurgy and corrosion of oil field equipment, B. B. Westcott, Gulf Research & Development Corporation, Pittsburgh, Pa.; development and production research, G. V. D. Marx, Standard Oil Company of California, San Francisco, Calif.; well spacing, R. D. Wyckoff, Gulf Research & Development Corporation, Pittsburgh, Pa.; production records, J. French Robinson, Peoples Natural Gas Company, Pittsburgh, Pa.; and production nomenclature, J. F. Dodge, University of Southern California, Los Angeles, Calif.

Mr. Moore was elected chairman of the program committee for 1935, with Mr. Wood ex-officio and Mr. Young secretary. Members are: C. E. Beecher, The Empire Companies, Bartlesville, Oklahoma; Mr. Doherty; H. N. Marsh, General Petroleum Corporation of California, Los Angeles, Calif.; E. W. Master, Shell Oil Company, Los Angeles; and A. C. Rubel, Union Oil Company of California, Los Angeles.

Oil States' Governors Made Honorary Members A.P.I.

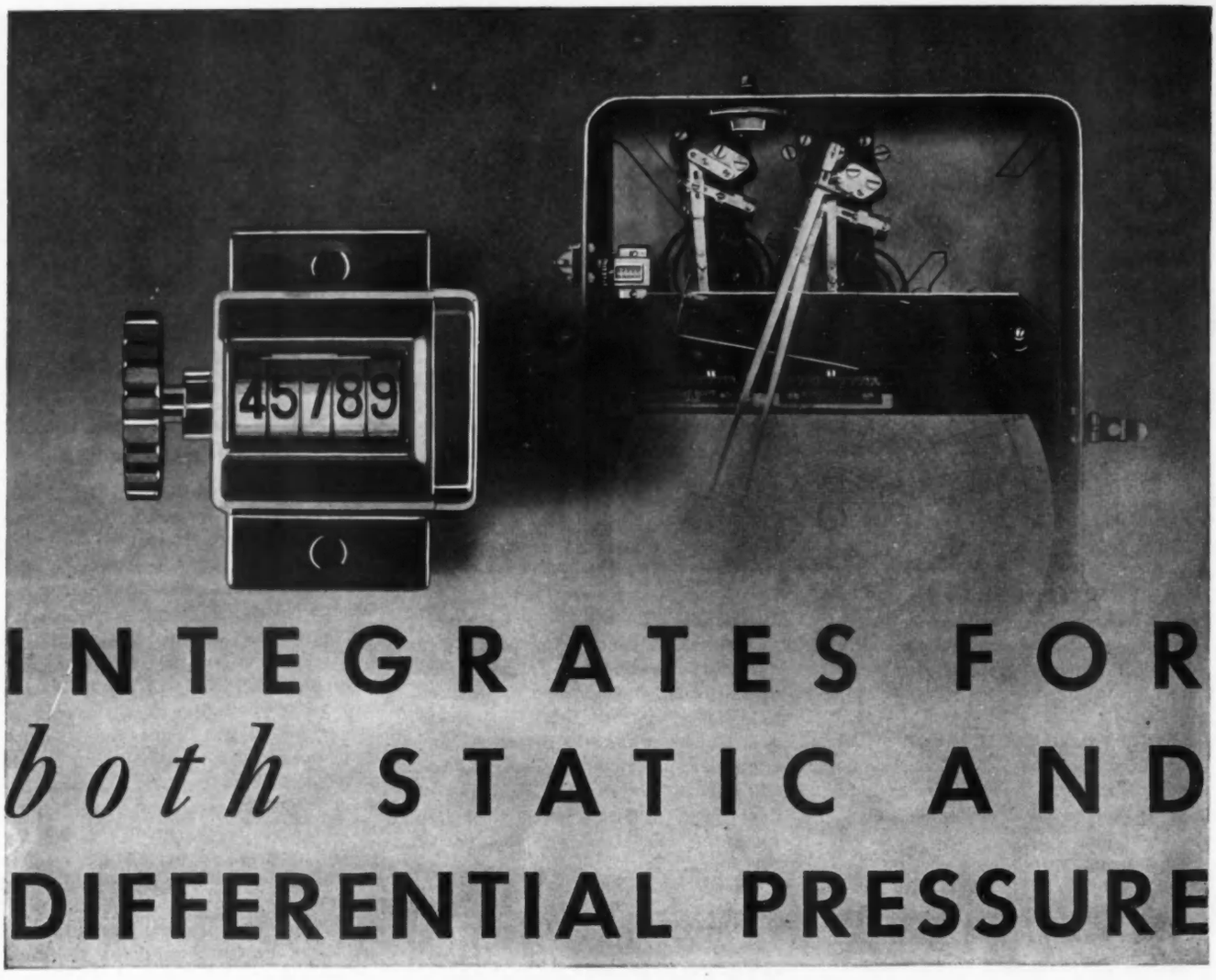
New York.—Governors of the 22 oil-producing states have been invited to become honorary members of the American Petroleum Institute.

The invitation was extended by President Axtell J. Byles in accordance with a decision reached by the board of directors that the governors of states in which oil is produced should have an opportunity to participate in discussions of the board and to learn of the many factors influencing trends in the petroleum industry. It was explained that the honorary memberships were created for the governors largely for the purpose of permitting a more general understanding of the industry and its problems.

Until the present there has been only one honorary member of the Institute. He is Mark L. Requa, of San Francisco, Calif., federal oil administrator during the World War. The position permits attendance at board meetings and participation in discussions, but grants no voting power.

Petroleum Motor Transport Holds First 1935 Meeting

The Petroleum Motor Transport Association of Oklahoma held its first regular meeting of 1935 on Friday evening, January 25, at which time newly elected officers were installed. Dinner was served at 6:15 at the Tulsa Club. President Atcheson appointed his committees for the year and the membership heard a report of the auditing committee in regard to financial condition of the association for the year just closed. The new officers are: W. K. Atcheson, Pure Oil Company, Tulsa, president; H. D. Patridge, Indian Territory Illuminating Oil Company, Bartlesville, first vice president; C. L. Bowman, Shell Petroleum Corporation, Tulsa, second vice president; and L. E. Schroeder, Mid-Continent Petroleum Corporation, Tulsa, secretary-treasurer.



INTEGRATES FOR *both* STATIC AND DIFFERENTIAL PRESSURE

● Direct reading . . . automatically . . . instantly! The INTEGRATING ORIFICE METER automatically computes the metered volume for variation in pressure and rate of flow. The total is always visible on the index. And the chart continues to give you a permanent hourly record for analysis and future reference. ● The operation is continuous . . . all functions being performed mechanically by special gearing without the use of clutches, reversible cams or levers. Thus the indicated total is always accurate. The INTEGRATING FLOWMETER operates on the same principle, but at constant pressure. ● These instruments have proved highly successful in measuring gas, air, steam, oil, water and other fluids. Engineering bulletin E-16 fully describing applications and operation will be sent you on request.

AMERICAN METER COMPANY
INCORPORATED
Measurement and control of Gas, Oil, Steam, Air and Liquids
ESTABLISHED 1836

METRIC METAL WORKS • ERIE, PA.

Albany Baltimore Birmingham Boston Chicago Denver Erie Kansas City
Los Angeles Philadelphia Pittsburgh New York San Francisco
WESTSCOTT & GREIS, INC., Dallas, Tulsa CANADIAN METER CO. LTD., Hamilton, Ontario

247

Pipe Line Construction
Activity May Be Slightly Greater

PIPE LINE construction work, which has been unusually slow during the past few years, is expected to be more active in 1935, although it will not reach anything like the "boom" eras known several years ago. In 1934, pipe line construction work showed considerable gain over 1933.

Foreign Work

Outstanding from an economic standpoint was the completion of Iraq Petroleum Company's 1150-mile crude oil line from the Kirkuk field in Iraq. The line, consisting mostly of 12-inch pipe, runs double from field to Haditha, thence in two legs, one to Tripoli, Syria, and the other to Haifa, Palestine, both on the Mediterranean Sea. Most of the construction work, particularly the difficult part across the desert and mountainous terrain was completed prior to 1934, but the line was not yet operating to its full capacity of 84,000 barrels daily at the close of the year. This pipe line transmission system proved the first outlet for the fields of Iraq, which are regarded as potential prolific producing areas, and, naturally, caused some changes in international petroleum markets. Most of the oil from Iraq is going to French and British markets. A short pipe line also was constructed on Bahrein Island, and this area became another international market factor, although quite small as yet.

Domestic Oil Lines

In the United States, most of the pipe line work consisted of short lines to new fields and the changing of existing systems to better serve present conditions; although there were several good size lines built. Stanolind Pipe Line Company built a 155-mile pipe line from El Dorado, Butler County, Kansas, westward to Hudson in Reno County, thence northward to Raymond, Rice County, where it tied in with a previous existing system serving Western Kansas. A portion of the pipe used in this work was reclaimed from the company's system running north out of Hominy, Oklahoma, into Kansas. Stanolind Pipe Line Company also built several short lines in Western Kansas that provided outlets for some of the wildcat producing pools in that area.

In California, Standard Oil Company of California is completing a 108-mile 12-inch pipe line from Kern County, San Joaquin Valley, to Estero Bay, San Luis Obispo County. This 60,000-barrel line is being built at a cost of approximately $4,000,000 and will provide a more efficient means of transporting crude from the San Joaquin Valley area to tide water.

Two pipe lines were laid from the Cut Bank, Montana, field during the year. Toronto Pipe Line Company finished a 30-mile, six inch line from Cut Bank northward to Coutts, Alberta, Canada, in August. International Pipe Line Company's 27-mile outlet for the field to The Texas Company's refinery at Sunburst was completed a few weeks earlier. These two pipe lines afforded the first and second direct outlets to refineries from the field, which during the year was doubled in size by extension discoveries.

Stanolind Pipe Line Company in December started construction of a 40-mile, eight-inch oil line from its Pauls Valley, Oklahoma, station to the Fitts pool, Pontotoc County. Typical of construction work during 1934, is Oklahoma Pipe Line Company's 18-mile, eight-inch line being built from the Fitts pool to its main line Francis station.

Natural Gas Systems

Natural gas transmission system construction activity also was slow during 1934. Lone Star Gas Company started and completed a 76-mile 12-inch line from the Long Lake field, located in southwestern Anderson County, Texas, to a point near Waco, Texas. It provided the first outlet from the Long Lake gas field.

A 55-mile 14-inch natural gas main from the Austin field, Mecosta County, Michigan, to Muskegon was completed November 13 by American Michigan Pipe Line Company, subsidiary of American Light and Traction Company. The line was the first major market for the new Austin gas field, which is estimated to have a recoverable gas reserve of 8,600,000 cubic feet.

A new six-inch gas line, 32 miles in length, was laid from the Chittim gas field in Maverick County, South Texas, to several nearby towns by Texas Gas Utilities Company. The line connects with the company's four-inch line about ten miles south of the town of LaPryor.

1935 Outlook

Although no definite pipe line projects of major proportions have been announced for 1935, it is thought pipe line construction work within the United States will be somewhat greater than in 1934. Foreign pipe line work, if the Iraq pipe line is to be considered into 1934 statistics, will be smaller. The majority of the 1935 activity will be in the laying of lines to present producing fields that have insufficient outlets and to fields not yet discovered, as well as changing of transmission systems to provide more efficient operation or service.

Rumors are current in California of pending pipe line work, largely of taking up old lines and rerouting them to better fit existing conditions. South Texas, West Texas, Oklahoma, New Mexico, Michigan and Kansas will see the majority of the pipe line activity. Western Kansas may become an important factor. There are a number of producing areas in this sector that are without pipe line connections, and with the need for additional oil reserves becoming more acute it is possible some of the pipe line companies will not let the small amount of production retard the laying of lines to the region, which is 100 miles and more from most trunk lines. South Texas, because of its numerous wildcat strikes, will have some pipe line construction work, but it will consist of short, small lines.

The Multiple Cylinder Engine has PROVED its superiority

Buda Engine powering a Lufkin drilling outfit

BUDA Oil Field Power Units have met all oil field demands!

- They are dependable.
- They have brought a smooth delivery of power that the single cylinder unit can't equal!
- They bring the economy of portability that permits them to be fitted into any oil field operation.
- They are compact — require less space and the minimum of foundation preparation!

Buda engines mean flexibility, improved power and lower costs in the solution of oil field power problems.

This has been proved by Buda engines that have been in pumping and drilling service eight years and over in both domestic and foreign fields.

They are used and endorsed by some of the world's largest and most particular oil companies. We will be glad to give you their names and show you Buda's in operation.

BUDA ENGINES

Natural Gas • Diesel • Gasoline • Butane

SERVICE When You Need It!

It's seldom you require service on a Buda but when you want it you want it quick and Buda has taken care that you GET IT.

Complete service facilities are provided at Houston, Ft. Worth, Kilgore, Tulsa and Los Angeles.

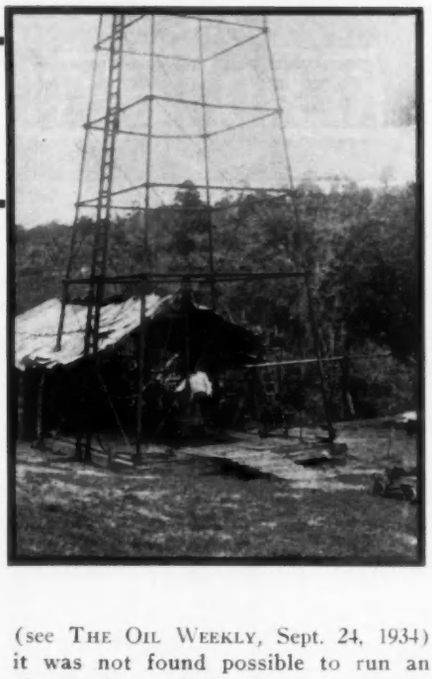
THE BUDA COMPANY

Harvey (Chicago Suburb) Illinois

Distributors

Houston, Texas: John Muller Co.
Ft. Worth, Texas: John Muller Co.
Kilgore, Texas: John Muller Co.
Tulsa, Okla.: Buda Engine Service of Tulsa.
Los Angeles, Calif.: Production Equipment Co.
New York, N. Y.: The Buda Co., 30 Church St.
Export Dept.: The Buda Co., 149 Broadway, New York, U. S. A.

FOREIGN DEVELOPMENTS AND TECHNOLOGY



Roumania Expects Greater Production As Result of Recent Exploration Work

F. W. PENNY
Consulting Geologist, Ploesti, Roumania

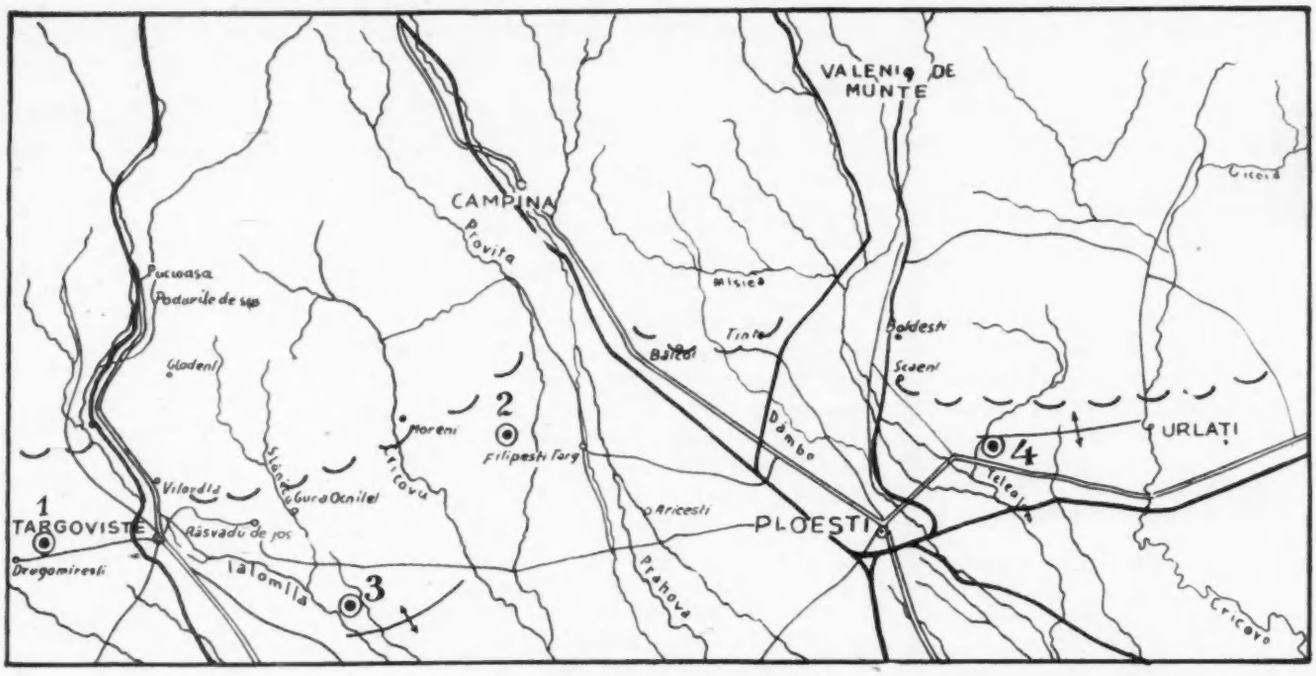
ROUMANIA has entered into an interesting and critical period from the point of view of future production. Until recently Roumania's production has been obtained from structures in or near the foothills of the Southern Carpathians, but the great plain stretching from the mountains to the River Danube has been untested.

The question has been asked, "Are there any structures away from the mountains, how far does the oil-bearing formation (the Meotic) exist away from the outcrops in the foothills, and, if it does, will it have a favorable lithology and be within reach of the drill?"

These questions now are in course of being answered, due to the fact that by recent legislation immense areas of state oil-rights have been made available for exploration for the asking, and to the fact that enough geophysical work now has been done in these gravel-covered plains to give the companies confidence in drilling wildcats.

During the course of 1934, four important wildcat wells were finished in the oil field region, located respectively at Chiturani, Ditesti, Dragomiresti, and Bucsani. Each afforded important guidance for future exploration.

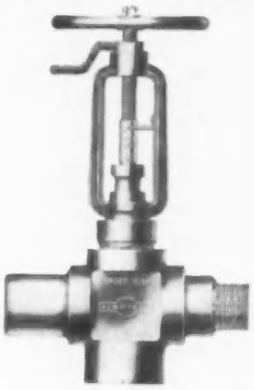
The Chiturani well, the third deepest in the world, was drilled to 11,160 feet, (see THE OIL WEEKLY, Sept. 24, 1934) it was not found possible to run an electric log and therefore the top of the Meotic is not accurately known. It is surmised to be about 9000 feet. The well was located on the south flank of an apparently simple anticline, and this depth was quite unexpected. The flank of this structure was thus found to be extraordinarily steep, which is probably attributable, on the analogy of known salt-mass structures,



Map showing four important wildcat completions in the foothills area of the southern Carpathians, which promise increased development in Roumania.

KERO TEST
REGISTERED U. S. PAT. OFF.

FORGED STEEL CONTROL CHOKES



MALE TEE TYPE

For—6000 lb TEST
3000 lb W. P.

¶ Forged Steel Body and Bonnet (Screwed).

¶ Accurate Indicator showing area of orifice opening in fractions of an inch.

¶ Malleable Iron Stem Locking Wrench.

¶ Male inlet and Female outlet.

¶ Male connections on inlet and outlet furnished special if desired.

¶ When used as an "ELL" fitting on cross arms of Christmas Tree, the EXTENSION Provided is a positive setting for tie rod clamps.

NEW BULLETIN (No. 115) will be sent on request.

KEROTEST
MANUFACTURING COMPANY
Pittsburgh, Pa.

KERO TEST
REGISTERED U. S. PAT. OFF.

to an overthrust from the north with a deep sinkage of the beds in front of it. These conditions indicate a disturbed and narrow structure, and do not bode well for future production.

Ditesti Wildcat

The Ditesti well was drilled to about 3300 feet and was abandoned while still in the Upper Pliocene beds. It evidently was located in a big syncline, and its location must have been due to the misinterpretation of geophysical evidence.

The Dragomiresti well was located in the Dambovita valley about four miles south of the foothills. It's most interesting result was to find the Meotic at about 5500 feet, showing that the dip away from the foothills structures was so gentle that the oil series was easily within reach of the drill in this region. It found some sands in the Meotic under a high pressure. So, although the well produced mostly water, there is hope that an oil field exists somewhere in the neighborhood and that subsequent wells will find it.

Bucsani Most Important

Because it opened up a new oil field, the Bucsani wildcat is regarded as the most important of recent tests. This is located about six miles south of the foothills. It not only found the Meotic within easy reach of the drill (about 4500 feet), but it found oil sands in it capable of making a 1200-barrel well.

A subsequent well shows that the Bucsani anticline is a big one; not a narrow-topped structure as at Chiturani, but a gentle anticline, probably two miles broad and several miles long.

Nearly all the probable productive area of Bucsani is under lease from the state as exploration areas which carry obligatory wells. Hence, the field should be outlined in the near future.

Dozens of large exploration areas have been accorded to the oil companies by the state, and scores more have been applied for. Now that the question of the existence of deep structures away from the foothills and the depth and lithology of the Meotic have been favorably answered at Bucsani, many geophysical prospects which the companies have been waiting to test will be drilled during the next year or so. Some of them will doubtless open up new and large fields.

It looks probable that Roumania will be capable of at least maintaining and probably increasing, its production during the next decade.

Increased Wildcatting Is Expected in Austria

Wildcatting, which was carried on with very little success in Austria during 1934, will be continued with increased diligence during 1935. The government of Austria has given the 1935 wildcat campaign additional impetus by changing the tariff rate on crude petroleum and gas oil per 100 kilograms to two crowns for each product. The old tariff rate on crude petroleum was 1.40 crown and on gas oil was 1.00 crown.

Compared with the domestic demand, Austria's supply of domestic gas and petroleum still remains negligible. During the first 10 months of 1934 the nation produced only eight million cubic meters of natural gas. What the recently discovered oil field at Zistersdorf is capable of doing is a matter which can only be determined by future drilling.

Will Drill Virgin Area South of Collo, Algeria

Gustave Meyer, an Algerian of Collo, Algeria, has announced intentions of drilling for oil in the Touggourt oasis district in the southern territories of Algeria. The spot selected is due south of Biskra.

According to the request for the permit, Mr. Meyer will prospect an area of three square miles. Geological features of this area are that it overlies an underground river and that the area is characterized by salt lakes.

Transylvanian Exploration Subsidized by Government

Thirty million lei has been allotted as the initial allotment for exploration of oil fields in Transylvania by the economic delegation as a result of a request made by the ministry of finance of Roumania.

In connection with the above government-directed exploratory efforts, it is interesting to recall that the private producer in Roumania today is handicapped by decline in prices, high railway transportation charges and excessive taxes.

According to reports, transportation from the oil fields of Roumania to Constanta represent about 40 percent of the present f. o. b. prices of oil products. In addition, the government's share of oil and the taxes imposed thereon amount to about 20 percent of its f. o. b. value leaving the producer only 40 percent of the export price.

Efforts are being made by the oil producers to ameliorate conditions affecting the transportation and export of oil.

MARKETS and STATISTICS

Markets Weaker as Hot Oil Output in East Texas Rises

THE markets for refined oils in the Mid-Continent were unsteady and weaker last week, and there was in prospect further unsteadiness, pending more definite action by Congress toward strengthening the federal role in controlling hot oil.

The weakness of the markets last week appeared to be due primarily to the releasing into commerce of about 2,500,000 barrels of untendered East Texas gasoline and other refind or partially refined oils, through temporary injunctions granted by a state district court. A group of East Texas refiners who owned the material had sought to enjoin the Texas Railroad Commission from requiring tenders on the products, on the grounds the products had been manufactured prior to inauguration December 10 of the commission's present shipping control program.

Much of the material involved in the litigation, in storage on the Texas Gulf Coast, was not of a nature to threaten the market stability, buyers having already been lined up. Such material that was contracted for, was destined to move to the Atlantic seaboard and to foreign countries, including France. But it was reported that possibly 500,000 barrels of the material was still in East Texas, and that some of it might be thrown upon the market at sacrifice prices.

Along with that releasing of the large quantity of oils through the court action, there was further disturbing of the Mid-Continent markets by continued gradual increase of hot oil producing and refining in East Texas. In the latter part of the week it was estimated that the hot oil volume had climbed to around 30,000 barrels daily, more or less, compared with about 20,000 barrels per day a week previously. The number of refineries in operation had increased, meanwhile, to about 25, from about a dozen, and of the new total, a large proportion were presumed to be using illegally produced crude.

While the output of hot products had risen to a relatively high level, however, a considerable part of the production was apparently going to storage. For the principal market outlet that was available was movement to points within the state by tank trucks, and even the trucks were coming in for closer supervision. The railroads are enjoined in federal district court from moving oils either interstate or intra-state without supporting tenders approved by the Texas Railroad Commission. It was thought, however, there might be occurring some successful falsification by shippers in obtaining tenders, in view of the added burden placed on the state tender committee through removal of the federal tender board from the picture by the Supreme Court decision in the Panama-Amazon cases.

While the rising volume of East Texas hot oil was a disturbing factor, it was to some extent offset by the rapid progress made in Congress toward reinstatement of federal control of interstate oil shipping. Restoration of that control is sought through a new law, that would replace Section 9 (c) of the National Industrial Recovery Act, held invalid by the Supreme Court. The Senate has already passed the Connally bill, designed for the purpose, and the House is expected to take immediate action on the measure.

Gasoline moving from East Texas refineries by truck has continued to be offered at prices substantially under those prevailing on material supported by tenders and thus eligible for rail shipment. The truck lots were being sold last week again at around two cents a gallon. In the meantime, U. S. motor fuel moving from East Texas refineries with benefit of tenders and railway tank car shipment, was selling for a quarter cent less than a week previously. The new prices were averaging about as follows: third grade gasoline, below 62 octane, 3⅜ cents a gallon; middle or standard grade, 62-67 octane, 3⅞ cents; and premium grade, 68-70 octane, 4⅜ cents.

Corresponding prices in North Texas and Group Three, Oklahoma, region, were averaging 3½, 4⅛, and 4⅝ cents a gallon. Those coinciding new prices represented no change for North Texas for the week, but an eighth cent decline for Group Three.

1389 Cars of East Texas Oil Products Moved During Week

DISPOSAL of 1000 cars, or about 200,000 barrels of gasoline, by two of the numerous East Texas refiners fortified with federal and state district court injunctions preventing the Texas Railroad Commission from interfering with shipments of products accumulated prior to December 10 marked the beginning of a period of wholesale dumping of refined products, price quotations have suffered in consequence, and reports persist in trade circles that tank car prices on gasoline will be forced to lower levels.

The big gasoline purchase was made last week at a flat price of 3⅛ cents per gallon, f.o.b. cars, through an independent group headed by Freeman W. Burford, president of East Texas Oil Refining Company, Dallas. Approximately 109,000 barrels were purchased from McMurrey Brothers interests, owner of the largest plant in East Texas with interests held in a number of additional plants, while the remainder of the order was filled by Union Refining Company, which operates a plant east of Gladewater. Immediately following this sale McMurrey Brothers are reported to have offered an additional 100,000 barrels of gasoline at the same price. Gasoline purchased by Burford and associates will be moved via tank cars to the Texas City tanker loading terminal of the Harbor Terminal Company, which is owned by Burford, Frank C. Hart, New York, and associates. It is understood that the material will be consigned to Atlantic Coast points.

Enthused over their victory in the courts East Texas refiners are stepping up their crude runs to stills, having averaged about 48,500 barrels daily during the week ending January 21. This represents a gain of about 15,000

KERR-MCGEE

FORGED STEEL
CONTROL CHOKES

MALE TEE TYPE

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

[illegible]

KERR-MCGEE
MANUFACTURING COMPANY
[illegible]

KERR-MCGEE

MARKETS and STATISTICS

Markets Weaker as Hot Oil Output in East Texas Rises

THE markets for refined oils in the Mid-Continent were unsteady and weak last week, and there was no prospect of further unsteadiness, pending more definite action by Congress toward strengthening the federal role in controlling hot oil.

The weakness of the markets last week appeared to be due primarily to the releasing into commerce of about 2,500,000 barrels of [illegible] East Texas gasoline and other refined or partially refined oils, through temporary injunctions granted by a state district court. A group of East Texas refiners who owned the material had sought to enjoin the Texas Railroad Commission from requiring tenders on the products, on the grounds the products had been manufactured prior to inauguration December 20 of the commission's present shipping control program.

[illegible]

sought through a new law, that would replace Section 9 (c) of the National Industrial Recovery Act, held invalid by the Supreme Court. The Senate has already passed the Connally bill, designed for the purpose, and the House is expected to take immediate action on the measure.

Gasoline moving from East Texas refineries by truck has continued to be offered at prices substantially under those prevailing on material supported by tenders and thus eligible for rail shipment. The truck lots were being sold last week again at around two cents a gallon. In the meantime, U. S. motor fuel moving from East Texas refineries with benefit of tenders and railway tank car shipment, was selling for a quarter cent less than a week previously. The new prices were averaging about as follows: third grade gasoline, below 62 octane, 3½ cents a gallon; middle or standard grade, 62-67 octane, 3¾ cents; and premium grade, 68-70 octane, 4¼ cents.

Corresponding prices in North Texas and Group Three, Oklahoma, region, were averaging 3⅝, 4⅛, and 4⅝ cents a gallon. These coinciding new prices represented no change for North Texas for the week, but an eighth cent decline for Group Three.

1389 Cars of East Texas Oil Products Moved During Week

DISPOSAL of 1389 cars, or about [illegible] barrels of gasoline by [illegible] East Texas refiners [illegible]

[illegible]

barrels above the daily average for the previous week, and was participated in by 28 plants. Illegal crude production in the field is likewise mounting to higher levels, excess production for the past week was estimated at between 30,000 and 35,000 barrels daily.

Expanded refinery operations is reflected in tank car shipments, during the week ending January 20 a total of 1389 cars of miscellaneous products were moved by the four railroads serving the field, as compared to 1027 cars the previous week. Products consigned to coastwise points aggregated 583 cars in contrast to only 317 cars the previous week.

East Texas Tank Car Shipments

Week ending 7 a. m. January 20, 1935

Products—	No. Cars	Estimated Gallons
Gasoline	549	4,441,237
Fuel Oil	400	3,856,262
Casinghead gasoline	134	1,171,513
Crude oil	75	663,180
Kerosene	75	605,040
Gas oil	58	482,134
Distillate	52	425,740
Residium	36	312,299
Topper crude	10	94,709
Total	1,389	12,052,114
Total previous week	1,027	8,866,599
Intrastate	349	
Interstate	457	
Coastwise	583	
Total	1,389	
Tendered	1,279	
Without tenders	110	
Total	1,389	

Oklahoma Market Firmer After East Texas Sales

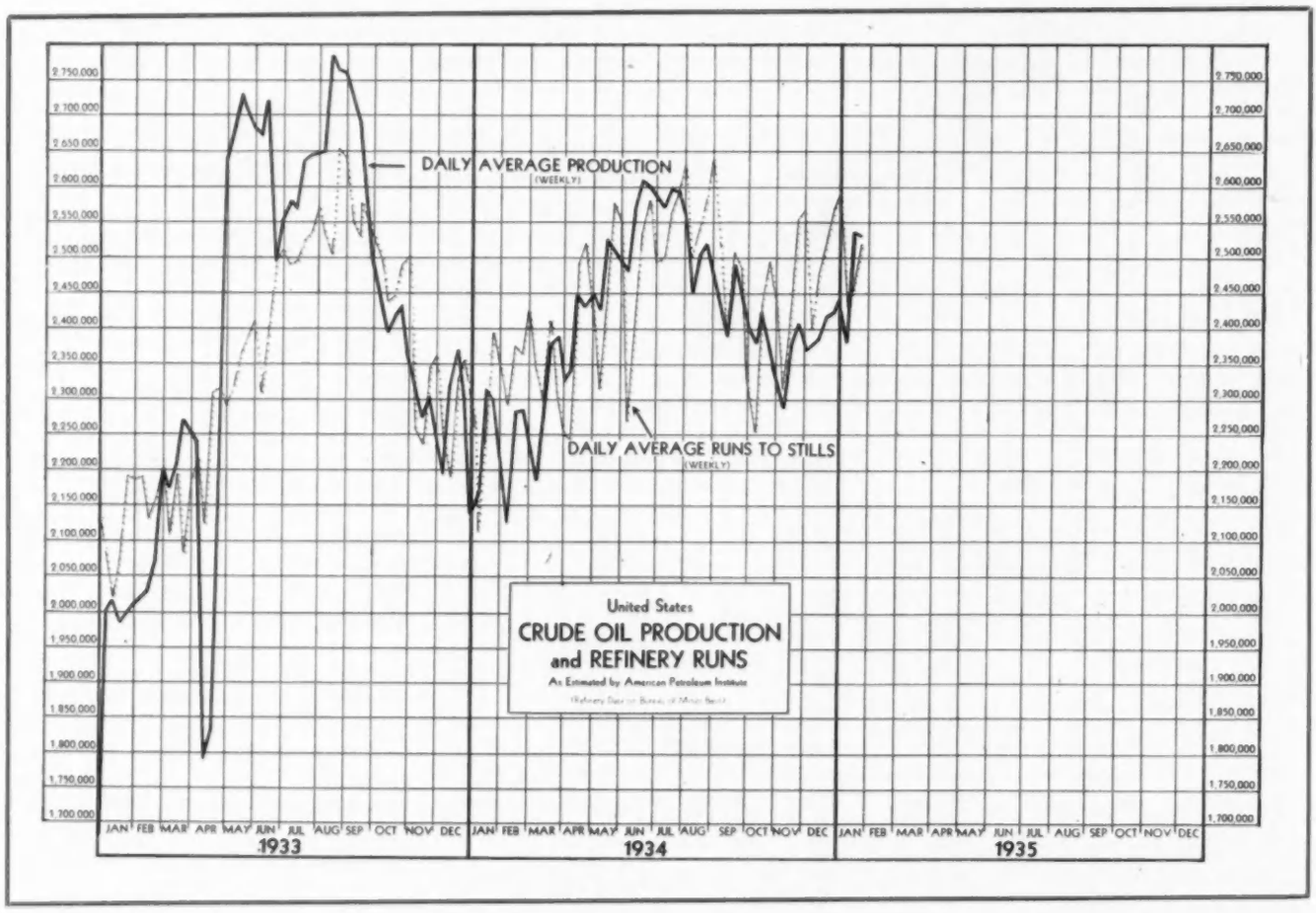
AFTER several days of weakness occasioned by the potential threat of refined material released by court order in the East Texas field, the Mid-Continent market had returnd to firmer ground late last week, and prices were expected to return to levels established earlier in the month.

Announcement was made in the latter part of the week that two independent refiners in the East Texas area had sold at better than three cents per gallon a large quantity of third grade U. S. motor fuel for shipment to Gulf Coast ports. This was hailed as an exceptionally favorable move by observers of the Mid-Continent market, who had feared that large amounts of the material would move into Group 3 territory at considerably below normal prices.

The Mid-Continent market was characterized as being steady, and the expected break apparently had failed to materialize to any appreciable extent.

Third grade U. S. motor fuel was quoted at from 3¼ to 3⅜ cents, which was favorable, in view of the fact inquiries had fallen to a minimum and contract shipments were temporarily on the downgrade.

Kerosene and distillates were reported steady under fairly good demand, while the naturals were coasting along at previously established levels. Cold weather throughout the major consuming areas was responsible for a steady movement of the natural, but business was steady and lacking of the usual cold weather spurts which normally cause price fluctuations.



Production Rises Further Above National Allowable

UNITED STATES crude oil production increased last week 12,530 barrels over the previous week's daily average, and was 83,125 barrels a day above the allowable set by the federal government, having averaged 2,543,425 barrels daily.

The slight increase for the new period was due to small gains in output in Oklahoma and Texas, most other important producing states and areas having produced at practically the same rates as in the previous week.

Figures herewith given do not include surreptitiously produced oil. Such production, occurring chiefly in East Texas, was on the increase last week, averaging, it was estimated, around 30,000 barrels daily for the period, compared with about 20,000 barrels a day the previous week. Additional refineries had resumed operations in East Texas, and were using increased quantities of such crude.

Oklahoma production of 509,950 barrels daily last week was about 12,000 barrels higher than in the previous week, and 20,000 barrels above the state's allocation. The increase resulted from a 20,000-barrel jump in Oklahoma City field's daily output, to 186,800 barrels daily. That increase was only partially offset by the Seminole area, which declined about 6000 barrels to a new average of 116,075 barrels daily. Other fields of the state showed but small fluctuations.

Texas recorded production increased about 3000 barrels, to 1,010,300 barrels daily, with the East Texas field largely responsible. In that area the allowable gradually increases, as additional new wells are completed.

Kansas production declined a little more than 2000 barrels, in averaging 140,975 barrels daily. The state's allocation from the federal government is 137,100 barrels daily.

California production was practically unchanged from the previous week's level, having declined 1000 barrels to 510,000 barrels daily. The new production rate was 36,100 barrels greater than the allowable set by the federal government.

Louisiana continued to overproduce, averaging 108,900 barrels daily, or 800 barrels a day more than in the previous week, and 9200 barrels a day more than the federal government allocation.

United States Crude Oil Production

Estimates Compiled by The Oil Weekly

District or State	Barrels Daily for Week Ending Jan. 26	Jan. 19
TEXAS—		
Texas Panhandle	61,200	59,500
North Texas	57,100	57,300
West Central Texas	26,300	26,500
West Texas	155,200	155,800
East Central Texas	51,700	51,800
East Texas Field	428,100	426,400
South Texas	57,100	56,300
Texas Gulf Coast	173,600	173,800
Total Texas	1,010,300	1,007,400
OKLAHOMA—		
Oklahoma City	186,800	166,120
Seminole Area	116,075	122,450
Tatums	5,000	6,000
Lucien	8,975	8,775
Others	193,100	194,950
Total Oklahoma	509,950	498,295
KANSAS—		
Ritz-Canton	9,625	9,725
Voshell	6,375	5,875
Nikkel-Hollow	12,475	12,650
Sedgwick	9,325	8,950
Others	103,175	106,000
Total Kansas	140,975	143,200
LOUISIANA—		
North Louisiana	23,100	23,400
Louisiana Gulf Coast	85,800	84,700
Total Louisiana	108,900	108,100
ARKANSAS	30,100	30,800
CALIFORNIA—		
Long Beach	62,000	64,000
Santa Fe Springs	37,000	39,000
Huntignton Beach	35,500	45,000
Dominguez	19,000	19,000
Inglewood	9,500	10,000
Ventura Avenue	24,000	26,000
Seal Beach	7,500	8,000
Midway-Sunset	54,000	56,000
Elwood	8,000	9,000
Kettleman Hills	76,000	65,000
Mountain View	22,000	15,000
Playa del Rey	9,000	12,000
Others	146,500	143,000
Total California	510,000	511,000
MOUNTAIN STATES—		
Wyoming	34,600	35,800
Montana	12,100	11,800
Colorado	3,900	3,900
Total Rocky Mountain States	50,600	51,500
NEW MEXICO	48,900	48,800
EASTERN STATES	103,200	102,000
MICHIGAN	30,500	29,800
Total United States	2,543,425	2,530,895

Texas February Allowable Increased 21,100 Barrels

Austin, Texas.—The Texas Railroad Commission Friday issued its new statewide proration order effective on February 1, fixing an allowable of 1,010,500 barrels per day approximately. This is 21,100 barrels less than the federal allocation of February. The difference should be ample to care for the increase in East Texas and other fields with expanding allowables, as well as to allow for any storage or excess oil, which is permitted to be run by the courts. At the statewide hearing last week the commission announced that this allowance would be made to prevent refined products in storage before December 5 from affecting the market should they be released.

New district allowables are as follows:

East Texas, estimated 428,000 barrels, based on 3.6 percent of the hourly potential.

Panhandle, 60,300 barrels, an increase of 1500 barrels which was allocated to Moore County.

North Texas, 59,400 barrels, an increase of 900 barrels granted to Foard County.

West Central Texas, 31,000 barrels.

East Central Texas, 51,953 barrels, a reduction of 49 barrels.

West Texas, 145,055 barrels, a cut of 2342 barrels.

Southwest Texas, 38,785 barrels, a reduction of 1240 barrels.

Government Wells, 18,645 barrels.

Gulf Coast, 177,159 barrels, a reduction of 1534 barrels.

Revisions in the allowables were made in three fields in East Central Texas, all which received small cuts which totaled 49 barrels.

There were 18 changes in West Texas. North Cowden was increased 1500 barrels to 3000 barrels per day. Howard-Glasscock was cut 1000 barrels to 16,500. Southward was reduced 2900 barrels to 7100 barrels. Shipley, a new field in the area, received an allocation of 1900 barrels.

Allowables in 43 Gulf Coast fields were changed. Barbers Hill was cut 1500 barrels to 18,500 barrels. One new field, New Baston, obtained an allocation of 210 barrels. Changes in other allowables for fields in this district ranged from 300 barrels downward.

In Southwest Texas allowables in 46 fields were changed. One new field, Barbacoas, with an allowable of eight barrels, was added. The Bruni field allowable was fixed at 1250 barrels, a cut to 50 barrels per well. The present allowance is 100 barrels per well.

Crude Runs to Stills, Finished and Unfinished Gasoline Stocks; Gas and Fuel Oil Stocks, and Cracked Gasoline Production, Week Ended January 19, 1935

(Figures in thousands of barrels of 42 gallons each)

DISTRICT	Daily Refining Capacity of Plants			Crude Runs to Stills		Stocks of Finished Gasoline			(a) Stocks of Unfinished Gasoline	(b) Stocks of Other Motor Fuel	Stocks of Gas and Fuel Oil	Daily Charging Capacity of Cracking Units			Cracked Gasoline Production
	Potential Rate	Reporting		Daily Average	% Operated	At Refineries	Bulk Term., in Trans. & Pipe Lines	Total at Refys., Term., etc.				Potential Rate	Reporting		Daily Average
		Total	%										Total	%	
East Coast	582	582	100.0	433	74.4	4,818	8,422	13,240	734	230	12,203	496	471	95.0	77
Appalachian	150	140	93.3	96	68.6	932	1,026	1,958	291	45	1,247	69	69	100.0	22
Ind., Ill., Ky.	446	422	94.6	313	74.2	3,681	3,958	7,639	652	70	4,871	325	309	95.1	98
Okla., Kans., Mo.	461	386	83.7	254	65.8	2,692	1,866	4,558	614	480	4,022	256	238	93.0	61
Inland Texas	351	167	47.6	98	58.7	1,181	93	1,274	203	465	1,812	82	66	80.5	25
Texas Gulf	601	587	97.7	539	91.8	5,720	289	6,009	1,386	145	10,248	358	355	99.2	98
Louisiana Gulf	168	162	96.4	109	67.3	698	384	1,082	238	.....	4,166	71	71	100.0	23
North La.-Ark.	92	77	83.7	44	57.1	162	78	240	40	35	471	41	38	92.7	7
Rocky Mountains	96	64	66.7	36	56.3	676	.....	676	91	50	745	46	42	91.3	10
California	848	822	96.9	425	51.7	8,128	2,191	10,319	847	2,670	66,249	209	209	100.0	52
TOTALS WEEK: January 19, 1935	3,795	3,409	89.8	2,347	68.8	28,688	18,307	46,995	5,096	4,190	106,034	1,953	1,868	95.6	473
January 12, 1935	3,795	3,409	89.8	2,333	68.4	27,062	18,571	45,633	4,862	4,315	106,814	1,953	1,868	95.6	469

Below are set out estimates of Crude Runs and Cracked Gasoline Production on B. of M. Basis for Week January 19, 1935, compared with January, 1934, Bureau figures.

Estimate B. of M. Basis January 19, 1935	2,520		525
Estimate B. of M. Basis January 12, 1935	2,510		520
U. S. B. of M. January, 1934: Daily Average Crude Runs	2,307	U. S. B. of M. January, 1934: Daily Average Cracked Production	473

(a) Amount of Unfinished Gasoline contained in Naphtha Distillates.
(b) Estimated. Includes Unblended Natural Gasoline at refineries and plants; also Blended Motor Fuel at plants.

Summary of Field Results, Week Ending January 19, 1935

State	Completions	Oil Wells	Gas Wells	Failures	Init. Prod
Arkansas	2	0	0	2	.....
California	14	13	0	1	7,500
Colorado	1	1	0	0	2,160
Kansas	22	19	0	3	13,785
Louisiana	6	3	0	3	2,095
Michigan	6	5	0	1	290
Montana	1	0	0	1	.....
New Mexico	7	4	1	2	10,395
Ohio	34	9	11	14	170
Oklahoma	29	17	1	11	56,280
Pennsylvania	10	0	8	2	.....
Texas	188	133	8	47	521,945
Total	320	204	29	87	614,620

Comparison of Permits Granted for New Wells

State	Week ending Jan. 19	Total this month	Total this year	Total this date last year	1934 year total
Arkansas	2	15	15	3	100
California	15	28	28	22	629
Louisiana	11	39	39	40	799
Kansas	29	86	86	50	1,015
Michigan	6	32	32	28	460
Oklahoma	51	120	120	90	2,045
Texas	183	636	636	359	10,550
Total	297	956	956	592	15,598

Court Permits Removal of Stored Oil Without Tenders

Austin, Texas.—Judges J. D. Moore and C. A. Wheeler, sitting jointly in the 53rd District Court, last week granted injunctions to nine operators permitting them to move oil products without railroad commission tenders.

In each instance evidence had been presented to the court to show that the oil was in storage before the processed oil order had been issued by the railroad commission on December 5.

Although attorneys for the state attempted to obtain five days stay of execution, the court declined to make this a part of the order. The additional time was asked to permit railroad commission officials to check the oil and determine that the products listed in the inventories filed were properly reported.

Assistant Attorneys General Archie D. Gray and D. J. Holt, who defended the railroad commission in these suits, gave notice of appeal. They hoped to obtain a stay order in the civil appeals court which would prevent the movement of the oil until the case was finally adjudicated.

In announcing the decision for the court, Judge C. A. Wheeler stated that no other injunctions of this nature would be granted until certain conditions had been complied with. The operator must have filed his inventory with the commission and have been denied a tender to move the oil, the court ruled, before the question could be properly appealed.

Another Firm Seeks to Move Untendered Oil

Austin, Texas. — Another suit was filed in the 53rd District Court Friday by E. & F. Petroleum Company, seeking an injunction which would permit the company to run oil without a railroad commission tender. The plaintiffs asserted in their petition that they desired to sell 4700 barrels of reclaimed oil, which has been in storage before December 5, but that the commission had refused to approve the tender. Earlier this week five injunctions were granted permitting the running of some 430,000 barrels of oil. While the operators petitions show that they had not asked for tenders, they stated to the court that this had been done after the petitions were written, and that the tenders had been denied.

Crude Oil Price Quotations

(Figures Represent Basic or Flat Prices—Revised to January 25, 1935)

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Oklahoma-Kansas	28—$ .84	2¢	40—$1.08	9-29-33
N. and N.-C. Texas	29— .79	2¢	40— 1.03	9-29-33
Texas Panhandle				
Gray County	34— .79	2¢	40— .91	9-29-33
Carson-Hutchinson	34— .69	2¢	40— .81	9-29-33
West Texas				
Ector, Pecos, Wk'lr	*.75			9-29-33
Crane, Upton, Howard and Glasscock	*.70			9-29-33
East Texas	*1.00			9-29-33
Texas Gulf Coast				
Conroe	35— 1.09	2¢	40— 1.19	9-29-33
Tomball	*1.15			9-29-33
Cleveland	*1.00			1-11-34
†Goose Creek, Hull Liberty, Orange, Pierce Junction, Moss Bluff, Raccoon Bend, Sour Lake, Spindletop, Sugarland, West Columbia	Below			
Humble, Rabbs Ridge	20— .82	2¢	34— 1.12	9-29-33
South and S.W. Texas	Below			
Refugio (Light)	20— .82	2¢	34— 1.12	9-29-33
Refugio (Heavy)	*.85			9-29-33
Saxet	*.85			9-29-33
Mirando	*.80			9-29-33
Pettus	*1.05			9-29-33
Salt Flat	*.87			9-29-33
Darst Creek	*.87			9-29-33
Arkansas				
El Dorado (Light) and Rainbow	29— .79	2¢	40— 1.03	3-17-34
El Dorado East Field and Smackover	*.70			9-29-33
North Louisiana	29— .79	2¢	40— 1.08	9-29-33
Urania	*.85-*.87			1- 1-34
South Louisiana	Below			
Lockport	20— .80	2¢	34— 1.10	9-29-33
Iowa, Cameron Mds.	Below 20— .70	2¢	34— 1.00	9-29-33
Rocky Mountain States				
Salt Creek	29— .84	2¢	40— 1.08	9-29-33
Elk Basin	*1.17			9-29-33

*All gravities—flat rate.
†Gulf Coast prices as posted by Humble Oil & Refining Company

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Grass Creek (Light)	*$1.17			9-29-33
Big Muddy	*1.01			9-29-33
Rock Creek	*1.02			9-29-33
Sunburst	*1.35			9-29-33
Lance Creek	*1.02			8-25-33
Osage	*.62			8-25-33
Cat Creek	*.45			8-25-33
Pondera	*.65			8-25-33
Hog Back, N. M.	*1.00			9- 8-33
Lea County, N. M.	*.75			9-29-33
Mid-West States				
Lima	*1.30			9-29-33
Illinois	*1.13			1- 5-34
Princeton	*1.13			1- 5-34
Western Kentucky	*1.08			5-26-34
California				
Signal Hill	14— .65	1¢	16— .66	9- 6-33
	17— .69	2¢	22— .84	9- 6-33
	23— .88	3¢	30— 1.09	9- 6-33
Seal B., Alamitos Hts.	19— .65	3¢	20— .68	9- 6-33
	21— .72	4¢	22— .76	9- 6-33
	22— .81	4¢	26— .93	9- 6-33
	27— .98	4¢	30— 1.10	9- 6-33
Huntington Beach	14— .65	4¢	15— .69	9- 6-33
	16— .72	3¢	19— .81	9- 6-33
	20— .83	3¢	28— 1.07	9- 6-33
	29— 1.09	3¢	30— 1.12	9- 6-33
Inglewood	14— .65	4¢	16— .73	9- 6-33
	17— .76	4¢	18— .80	9- 6-33
	19— .83	4¢	20— .87	9- 6-33
	21— .90	4¢	22— .94	9- 6-33
	23— .97	4¢	24— 1.01	9- 6-33
Playa del Rey	14— .65	1¢	15— .66	9- 6-33
	16— .69	4¢	17— .73	9- 6-33
	18— .76	4¢	19— .80	9- 6-33
	20— .83	4¢	21— .87	9- 6-33
	22— .90	4¢	23— .94	9- 6-33
	24— .97	3¢	25— 1.00	9- 6-33
			26— 1.04	9- 6-33
Olinda-Brea Canyon	14— .65	4¢	16— .73	9- 6-33
	17— .76	3¢	28— 1.10	9- 6-33
Athens-Rosecrans Domingues	23— .83	3¢	24— .86	9-1-33
	25— .90	4¢	26— .94	9- 6-33
	27— .97	3¢	29— 1.04	9- 6-33
	30— 1.08	4¢	31— 1.12	9- 6-33
			32— 1.15	9- 6-33
Elwood (fob ship)	33— 1.03	3¢	37— 1.15	9- 6-33
Torrance	14— .65	1¢	15— .66	9- 6-33
	16— .69	3¢	20— .81	9- 6-33
	21— .83	3¢	26— .98	9- 6-33

*All gravities—flat rate.

DISTRICT	Low Grav.	Dif.	High Grav	Date
Richfield	15—$ .65	2¢	16—$ .67	9- 6-33
	17— .70	4¢	20— .82	9- 6-33
	21— .85	4¢	22— .89	9- 6-33
	23— .93	4¢	24— .97	9- 6-33
	25— 1.00	4¢	27— 1.08	9- 6-33
	28— 1.11	4¢	29— 1.15	9- 6-33
Whittier-LaHabra	15— .65	3¢	18— .74	9- 6-33
	19— .78	3¢	24— .93	9- 6-33
Montebello	19— .65	1¢	20— .66	9- 6-33
	21— .69	3¢	22— .72	9- 6-33
	23— .76	4¢	24— .80	9- 6-33
	25— .85	4¢	26— .89	9- 6-33
Coyote Hills	16— .65	3¢	19— .74	9- 6-33
	20— .78	3¢	29— 1.05	9- 6-33
	30— 1.09	3¢	34— 1.21	9- 6-33
Santa Fe Springs	21— .72	4¢	22— .76	9- 6-33
	23— .79	4¢	25— .87	9- 6-33
	26— .90	4¢	28— .98	9- 6-33
	29— 1.01	4¢	30— 1.05	9- 6-33
	31— 1.08	4¢	33— 1.16	9- 6-33
	34— 1.19	4¢	35— 1.23	9- 6-33
	36— 1.26	4¢	38— 1.34	9- 6-33
New Hall, McKittrick, Kern River	14— .57		19— .57	9- 6-33
Midway-Sunset, Elk Hills, Buena Vista Hills	17— .57	4¢	18— .61	9- 6-33
	19— .64	3¢	22— .73	9- 6-33
	23— .77	4¢	33— 1.17	9- 6-33
Lost Hills	17— .57	4¢	21— .73	9- 6-33
	22— .76	3¢	30— 1.00	9- 6-33
Coalinga	17— .57	1¢	18— .58	9- 6-33
	19— .62	3¢	21— .68	9- 6-33
	22— .72	3¢	25— .81	9- 6-33
Wheeler Ridge	17— .57	1¢	18— .58	9- 6-33
	19— .61	3¢	25— .79	9- 6-33
Kettleman Hills	33— .93	3¢	39— 1.11	9- 3-33
Pennsylvania				
Bradford	*2.20			1- 4-35
Sw Pa. Pipe Line	*1.87			1- 4-35
Eureka Pipe Line	*1.82			1- 4-35
Buckeye Pipe Line	*1.72			1- 4-35
Corning Grade	*1.32			10- 2-33
Michigan				
Central Michigan	*1.20			9-30-33
Muskegon	*.70-1.00			12-31-32
Canada				
Petrolia	*2.10			9- 9-33
Oil Springs	*2.17			9- 9-33

*All gravities—flat rate.

California Gasoline Tax Collections Up

Sacremento, Cal.—California gasoline taxes for 1934 amounted to $39,625,055.32, marking an increase of $317,702.33 over the corresponding figure for 1933, according to announcement made here by the State Board of Equalization. This is a gain of eight percent as contrasted with a loss of 19 percent in 1933, when the total taxes from this source were $39,307,352.99, or $763,985.88 less than in 1932. Total taxable gallonage in December was 111,919,801.

December assesssments just completed by the State Board have added $3,324,018.29 to the motor vehicle fuel sales previously taxed during the past year. As compared with similar taxes for the last month of 1933, these reveal a gain of $456,494.06, or 1½ percent.

This showing is regarded by the Board as encouraging in view of a loss of 17.07 percent in the taxes for November contrasted with those for November, 1933.

Analyzing trends of the gasoline tax, the Equalization Board states that the highest collections for any calendar year were made in 1931 when they reached a total of $41,625,893.24. In each subsequent year collections from the three cents per gallon tax have steadily declined until the year just closed, although in individual months gains have been shown from time to time.

Not all the fuel tax assessed is available for road purposes, the board points out in its comment. Refunds made by the State Controller on account of non-highway uses absorb approximately 10 percent of the tax, so that less than $36,000,000 out of the total collected for 1934 will be available for road work. Expenses of administration take only a small fraction of the proceeds.

MAJOR PRICE CHANGES

	Penns. (Nat. Tr.)	Mid-Cont. (36 Gr.)	Calif. (26 Gr.)
March 5, 1933	.....	.....	Cut 24.
May 2, 1933	.....	Cut 19.	.....
May 9, 1933	Cut 20	.....	.....
May 22, 1933	Up 10.	.....	.....
June 19, 1933	Up 10.	Up 19.	.....
June 26, 1933	Up 10.	.....	Up 9-12
July 6, 1933	Up 13.	Up 10.	.....
July 17, 1933	Up 15.	.....	.....
July 28, 1933	Up 15.	.....	.....
August 11, 1933	Up 10.	.....	.....
August 24, 1933	.....	Up 10.	.....
August 30, 1933	Up 15.	.....	.....
September 6, 1933	Up 10.	Up 10.	Up 15.
September 8, 1933	.....	Up 15.	.....
May 1, 1934	Up 10.	.....	.....
November 6, 1934	Cut 25	.....	.....
December 6, 1934	Cut 25.	.....	.....

CRUDE PRODUCTION TAXES

Oklahoma—Three percent of gross value less royalty interest.

Texas—Two cents or 2 percent, whichever is higher.

Louisiana—From four to 11 cents a barrel, depending upon gravity.

Arkansas—2.6 percent of gross market values.

Montana—Three percent of gross value at well and ½-cent per barrel.

Wyoming and New Mexico—Production tax based upon state and county assessments.

California—.66443 mills per barrel of oil produced and 17.39 cents per acre on proved oil lands.

Tyler, Texas.—Another small refinery has been completed and placed in operation in the East Texas field even though more than two thirds of the plants have been inactive for some weeks. Bonita Refining Company, Henderson, is operating a small crude skimming plant situated near Joinerville, with a four-inch crude gathering system connected to Yandell Rogers et al's Bradford lease. Construction of the plant was undertaken last October when independent refiners were thriving in East Texas. Bonita Refining Company was organized by A. L. Brantley, O. B. Jones and J. G. Fryman.

SAFE WITH B. S. & B. SAFETY HEAD

Excess pressure CANNOT burst the pressure vessel equipped with a B. S. & B. Safety Head —the Head goes out and that is all. Safety Heads are accurate in bursting pressures, durable, fool-proof, will not strike sparks.

"BLOWED UP" WITHOUT IT

B. S. & B. Safety Heads are made in sizes, bursting pressures and materials suitable for pressure tanks, mud pumps, pipe lines, separators and hydraulic systems. One 4" Safety Head has the capacity of 32 or more 2" pop valves. LET SAFETY HEADS ELIMINATE YOUR EXPLOSION HAZARDS.

Black, Sivalls & Bryson (INC.)

BS&B

ASK FOR ILLUSTRATED BOOK

OKLAHOMA CITY

Reorganized Concern Plans Large E-Tex Gasoline Plant

Shreveport, La.—H. R. Dickerson and his associates purchased all the capital stock of the former stockholders of Sabine Valley Gasoline Company, Inc., and have reorganized and financed a gasoline plant to be constructed in East Texas to extract natural gasoline from casinghead gas. The plant will have a capacity to treat 10,000,000 cubic feet of gas per day and will have 1002 wells tied in, with a daily production of 35,000 gallons. The plant will cost approximately $500,000 when completed.

The directors of Sabine Valley Gasoline Company, Inc., are H. R. Dickerson, Laurice W. Dickerson and W. D. Wilson.

The officers are H. R. Dickerson, president and treasurer, W. D. Wilson, secretary, and Laurice W. Dickerson, vice president.

H. R. Dickerson, president and manager was formerly with Arkansas Natural Gas Company and subsidiaries, as vice president in charge of all operations, since the merger of 1928, leaving them in March, 1933. Prior to this connection he was connected with Natural Gas and Fuel Company of El Dorado, Arkansas, and has been in the oil business, building and operating gasoline plants, oil and gas producing properties for the past 24 years. He organized Gregg Tex Gasoline Corporation, which built a plant located northwest of Longview in the East Texas field.

Fifty Percent Increase In Texas Tax Proposed

Austin, Texas.—The first bills to increase the gross production or "severance taxes" on oil and gas were introduced in the legislature last week.

Representative J. D. Settle of Abernathy introduced a bill providing a tax of three cents per barrel on oil until the price reaches one dollar, and three per cent of the value of the product thereafter.

This would mean an increase of 50 percent in this tax, which is now two cents per barrel when oil sells for less than one dollar, and two percent of the value thereafter.

The tax on natural gas would be 1/5 of one cent per thousand cubic feet, under another bill introduced by Settle. The tax now is two percent of the value of the product, which ranges from two to six cents per thousand.

A. S. M. E. Oil and Gas Power Division Meeting

Tulsa.—The Oil and Gas Power Division of the American Society of Mechanical Engineers will hold its annual national meeting at the Mayo Hotel, on Wednesday, Thursday, Friday and Saturday, May 8 to 11, inclusive. The Mid-Continent Petroleum Division will cooperate by arranging for symposia on the production and transportation phases of the petroleum industry. Although the subjects for the production meeting are definite acceptances from the proposed authors have not yet been received. Papers for the transportation symposium are in the tentative stage but expected to be definitely assigned at an early date. There will be about 20 exhibit booths, exhibiting accessory parts, such as centrifuges, filters, piston rings, fuel pumps, chain drives, special alloys, etc. Definite program for the production symposium and tentative program for the transportation symposium are as follows:

Production: "Central Power Plants Transmitting Power Electrically to Wells", George S. Bays, Stanolind Oil and Gas Company.

"Central Power Plants Transmitting Power Mechanically to Wells", H. M. McClain, Magnolia Petroleum Company.

"Central Power Plants Transmitting Power Pneumatically to Wells", L. A. Ogden, Pure Oil Company.

"Gas and Diesel Individual Well Pumping Units", Glenver McConnell, Shell Petroleum Corporation.

Transportation: "Use of Sour Crude In Solid Injection Diesel Engines", J. B. Harshman, Stanolind Pipe Line Company.

"Experiences of Compressor Explosions in Diesel Engine Stations", W. G. Heltzel, Stanolind Pipe Line Company.

"Diesel Cooling Systems", H. C. Kincade, Gulf Pipe Line Company.

"Diesel Engine Electrification of a Pipe Line System", J. M. McGregor, McGregor Engineering Company.

A. I. M. E. Preliminary Program Is Announced

New York.—The Petroleum Division of the American Institute of Mining and Metallurgical Engineers will hold its annual meeting in New York on Tuesday and Wednesday, February 19 and 20.

The preliminary announcement of the program shows that Tuesday morning will be devoted to production engineering with the following three papers scheduled for delivery:

"Influence of Well Diameter Upon the Pressure Gradient and Rate of Flow of Oil through the Reservoir Rock in the Vicinity of a High Pressure Flowing Well," by L. C. Uren, J. Domercq, Jr., and J. Mejia.

"Fundamentals of Casing Joint Design and Field Application," by J. B. Graham and E. E. Smith.

"The Study of Pumping Principles by Means of an Electrical Analogy," by Emroy Kemler.

Tuesday afternoon the program will be devoted to economic topics. Four papers are on the program. They are:

"Collective Planning in the Petroleum Industry," by Joseph E. Pogue.

"Domestic Consumption of Motor Oil," by Albert J. McIntosh.

"Forecasting the Relative Price Movements of Petroleum Securities," by Norman D. Fitz Gerald.

"Futures Trading in Crude Oil and Gasoline," by J. Elmer Thomas.

The program for Wednuesday morning will be devoted to a symposium of domestic oil production with papers to be delivered by various authors on all states and important districts. Wednesday afternoon the same type of program will continue, only on foreign producing countries.

Texas Permits for Week Below Recent Average

Austin, Texas.—The Texas Railroad Commission approved last week permits for the drilling of 183 new wells, slightly below the average of 200 which have been allowed each week for several months.

There were 67 permits granted in East Texas, of which Sinclair Prairie Oil Company obtained 54. There were 40 in Gregg County, 18 in Smith and nine in Rusk County.

North Texas reported 41 new locations, with 14 in Wichita and 11 in Archer County.

In Southwest Texas 27 new locations were approved, while the Gulf Coast area dropped to 10.

West Central Texas reported 18 new permits, and there were eight in West Texas.

Extension Attempt Fails in Shawnee Area

Shawnee, Okla.—Phillips Petroleum Company's attempt to extend the new Shawnee pool approximately one mile southward failed during the week when Windall 1, C NW SE NE 8-10n-4e, reached 5629 feet in Wilcox sand topped at 5545 feet and was abandoned. It was also dry in the Earlsboro sand from which the discovery well is producing.

Texas Petroleum Council Officers Are Reelected

Austin, Texas.—At a meeting of the Texas Petroleum Council held in Austin last week, the members reelected for the coming year all officers who served last year. New directors were named to replace those who had withdrawn from the organization for one cause or another.

The following officers were named: R. L. Weeklock of Corsicana, president; John E. Kilgore of Wichita Falls, legal vice president; E. O. Buck of Houston, technical vice president; Allen Peden, Austin, executive vice president.

New directors named were: Ed Freeman, The Texas Company, Houston; R. H. Morrison, The California Company, Dallas; E. H. Blum, Atlantic Oil Producing Company, Dallas; W. F. Knode, Corpus Christi; R. S. McFarland, Texas Seaboard Oil Company, Dallas; Clyde Pape, Selby Oil & Gas Company, Tulsa; H. B. Simcox, Continental Oil Company, Fort Worth; C. M. Bryson, British-American Oil Producing Company, Tulsa; S. M. Nixon, Southern Alkali Corporation, Corpus Christi; J. C. Hunter, Gregg Company, Gladewater; James Nolan, Barnsdall Corporation, Tulsa; B. C. Clardy, Shell Petroleum Corporation, Houston.

Commission Plans Revised Tomball Spacing

Austin, Texas.—The Texas Railroad Commission has taken under advisement the application of E. O. Oualline for a revision of the spacing rule in the Tomball field to allow the drilling of wells on tracts smaller than 20 acres.

The current 20-acre spacing rule was installed in the field before the first producer was completed, largely because of the experience encountered at Conroe, a similar field.

Oualline pointed out to the commission that there were now 110 wells in the Conroe field drilled on smaller tracts, in some instances less than two acres. He urged this as evidence that closer spacing had little to do with the cratering conditions and fire hazards feared.

Frank Michaux, Humble Oil & Refining Company geologist, testified that closer spacing at Tomball would be especially hazardous in the townsite area, which he stated was on top of the gas cap.

Hines Baker, Humble Oil & Refining Company attorney, said that his company was attempting to work out pooling agreements with owners of smaller tracts whereby they would share in the production from each unit in proportion to their acreage.

Sympathies of the commission were definitely on the side of the small tract owners who had no desire to join with Humble Oil & Refining Company in their proposed operations.

Fitts Pool Boosts Oklahoma Initial

Tulsa.—The dominant position which the Fitts pool of southeastern Pontotoc County has assumed in Oklahoma oil affairs was ably illustrated during the week when three new wells added 48,234 barrels of the total of 56,281 barrels initial production from the state. In addition a 50,000,000 cubic foot gasser was completed in the pool. Reports of the week show 17 oil wells with the combined initial shown above, one dry gas well as shown, one abandoned location, two rigs abandoned in the southwestern portion of the Oklahoma City pool and eight dry holes, a total of 29 completions compared to 51 first reports. Completions of the week involved 61,552 feet of drilling of which 2199 feet were in three old wells. One old well was plugged back 190 feet and recompleted for 25 barrels.

With a new development program approved and in effect Osage County went into the lead in new work with nine first reports, only two of which were in the South Burbank pool. Pontotoc County was second with six starts all in the Fitts pool. Other counties in the order of numbers of starts were as follows: Pottawatomie and Jackson counties, four each; Creek, Oklahoma, Okmulgee, and Stephens counties, three each; Comanche, Marshall, and Noble counties, two each; and Garvin, Jefferson, Kay, Lincoln, Logan, Muskogee, Okfuskee, Payne, Seminole and Tulsa counties, one each, a total of 21 counties representing a large portion of the state.

Logan County

Guthrie, Okla.—Shell Petroleum Corporation et al's Hinzel 1, C SE SW SW 7-16n-2w, less than one half mile southwest of the townsite in south central Logan County, cored sand, probably Layton, from 4455 to 4460 feet and was drilling ahead below 4485 feet. This test is located on a large block which has long been highly thought of.

Seminole Wildcat Well Gets Production Outlet

Konowa, Okla.—Gypsy Oil Company's Grayson 1, C SW SW NW 13-6n-5e, new wildcat discovery 1½ miles west of production in the Konawa pool in southwestern Seminole County, was given an outlet during the week when Gulf Pipe Line Company of Oklahoma connected with a combination two- and four-inch line running eastward to a point approximately four miles east of the Konawa pool. Late in the week operators swabbed 745 barrels in 20 hours. During the first 30 minutes after it had been swabbed down it filled up 400 feet. Production is from Simpson dolomite topped at 3745 feet with the principal pay from 3809 to 3812 feet, the total depth. It is rated at a minimum of 25 barrels per hour on the swab.

Importance of Otoe Test Still Unknown

Otoe, Okla.—Importance of Marathon Oil Company's find 7½ miles east of here in eastern Noble County was still undetermined as operators fished for bailer and 4000 feet of sand line in Gilbert 1, C NE NE NE 24-22n-2e. Upper Wilcox sand was logged from 4411 to 4423 feet and second Wilcox from 4449 to 4480 feet, the total depth. With the bailer and line in the hole the test was opened early in the week. During the first minute it made gas only and then headed for a 14-minute flow of 60 barrels of 42.8 gravity oil. Subsequently it was reopened for a head of 50 barrels. Late reports indicate that operators have hold of the sand line and may have the bailer out of the hole at any time.

Fitts Pool Potential Estimated 106,470 Barrels

Ada, Okla.—Importance of the Fitts pool of southeastern Pontotoc County from a potential viewpoint was seen late in the week when 29 wells had been given an official potential of 106,470 barrels, an average of 3671 barrels per well. All gauges were of four hours duration and taken through 2½-inch tubing. Rules under which this pool is being developed and produced should ultimately make it one of the outstanding examples of gas energy conservation. All wells are required to be completed through 2½-inch tubing after a short test through casing.

Start Two Tests Near Fitts Wildcat

Jesse, Okla.—Paramount Petroleum Company was delayed in drilling plugs at Graham 1, C SW SE SW 13-1n-7e, when bad weather made roads impassable for heavy equipment. That this test two miles south of here and 5½ miles southeast of the Fitts pool is considered a good shot for commercial production was evidenced by the action of The Texas Company in staking location for the west

Operators Want to Drill 67 Polo Tests

Perry, Oklahoma.—The Polo pool of western Noble County promises to be one of the most active of the newer pools during 1935 in event the proposed development program is approved by the oil administrator. Operators have asked permission to drill 67 wells and expect to have a decision within a short time.

The pool was discovered by Stanolind Oil & Gas Company et al's Vose 1, C SW NE SE 28-22n-2w, eight miles northwest of Perry. Upper Wilcox sand was logged from 4817 to 4861 feet, second Wilcox from 4899 to 4919 feet, the well plugged back to 4895 feet and completed for 1300 barrels on July 28, 1934. The discovery well is located near the center of a 240-acre community block owned by The Texas Company and Darby Petroleum Corporation, 33 1-3 percent each and Stanolind Oil & Gas Company and Amerada Petroleum Corporation the remaining 33 1-3 percent. Stanolind operates the properties. As of a recent date 11 oil wells had been completed, one well was shut in awaiting orders with promise of making only a small producer, and one was a dry hole. Of the five drilling wells, two were ready for completion, one was trying to loosen stuck drill pipe and an additional location was ready to rig up. Productive limits have been defined only partially on the northwest and ultimate extent of the pool cannot be determined at this time. Five of the completed oil wells are in the community block.

Stanolind Oil and Gas Company's DeVore 3, C SE SW NW 27-22n-2w, flowed 403 barrels in 3½ hours and was shut in awaiting potential gauge, total depth is 4916 feet. DeVore 4, C NE SW NW 27-22n-2w, north offset to DeVore 3 and owned by the same operator, yielded 250 barrels in 3½ hours and was also awaiting potential gauge. On the discovery lease Stanolind et al's Voss 5, SE NE SE 28-22n-2w, set casing at 4760 feet and was waiting on cement to set with total depth at 4765 feet.

Potential gauges on the first 11 wells totaled 20,645 barrels based on a four-hour gauge times six. Twin State Oil Company's DeVore 2, C SE NW NW 27-22n-2w, the northeasternmost well in the pool, had the largest potential with a rating of 2,644 barrels.

offset and Sunray Oil Company a location one half mile directly north. The former is in the C SE SW SW and the latter in the C SW SE NW, both in the same section with Graham 1.

In the Fitts pool, Phillips Petroleum Company stepped one quarter mile west of production with Norris 5, C NW NE SW 25-2n-6e. This location is reported to be dangerously near a fault and probably should be classified as a semi-wildcat.

Oklahoma Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BECKHAM COUNTY—		
Schultz & Pois, Van Vactor 1, ne se ne 25-8n-22w	*	1440
CARTER COUNTY—		
Daphfine Oil Co., Butler 1, nw nw ne 13-2s-3w	*	3520
CREEK COUNTY—		
Doke & Hughes, Jones 6, cwl nw nw 10-17n-8e	80	1438
Gray et al, Morgan 1, sw ne sw 9-17n-8e	10	2706
McINTOSH COUNTY—		
Lindy Oil Co., McNac 2, sw sw se esw 27-12n-14e	*	791
MUSKOGEE COUNTY—		
F. Boyle, Russell 9, csl ne se 19-15n-16e	5	1246
OKFUSKEE COUNTY—		
Stekoll et al, Pincham 6, cn½ sw ne se 2-10n-11e	12	1700
OKLAHOMA COUNTY—		
Banner Prod. Co., Bell 3, sw nw nw ne 27-11n-3w	rig	abn.
Banner Prod. Co., Earps 7, ne sw ne ne 22-11n-3w	rig	abn.
OKMULGEE COUNTY—		
Abby Oil Co., Sango 2, se sw se 24-14n-11e	30	2774
J. L. Selby, Bonner 9, cwl ne nw 6-14n-15e (owdd)	*	2265
Superior Oil Co., McIntosh 1, nw ne nw 17-15n-12e	*	2679
Klingensmith, G. Adams 1-A, cnl ne sw 35-16n-11e	40	2327
OSAGE COUNTY—		
W. C. Elliott, 1-A, ne se ne sw 10-21n-12e	12	1272
Barnsdall Oil Co. 11, nw se se nw 30-21n-9e	*	340
Gillispie 23, cel ne 8-20n-12e (owdd)	40	2194
PONTOTOC COUNTY—		
Carter Oil Co., Hardin 3, ne ne sw 30-2n-7e	¶3-7962	4170
Moore et al, Showers 1, nw sw nw 29-2n-7e	¶50	1825
Carter Oil Co., L. Brown 1, nw se se 25-2n-6e	¶8-17,280	4300
Blackstock, Craddock "B" 3, nw ne se 25-2n-6e	¶8-22,992	4297
POTTAWATOMIE COUNTY—		
British-American, Reedy 2, nw nw sw 20-9n-5e	lcn.	abn.
Vivian Oil Co., Duval 4, nw se se 4-7n-4e	38	4040
Jones, Brandenburg 1, se se sw 3-7n-4e	480	3502
Black Gold Pet. Co., Calico 1, cne nw 15-7n-3e	316	4488
SEMINOLE COUNTY—		
Empire Oil & Ref. Co., Davis "B" 2, se se ne 30-7n-8e	731	3021
Slick, Reed 3, sw nw se 31-7n-8e	6228	4195
Pure Oil Co., J. Tiger 1, se ne sw 3-8n-5e (owpb)	25	3970
Rogers Oil & Gas Co., Willington 1, sw sw ne sw 18-8n-7e	*	3282
STEPHENS COUNTY—		
Murphay, Fobb B7, se ne sw 18-2s-8w (owdd)	*	2075

*Failures; †Junked; ¶Million cu. ft. gas.

Edmond Extension Hopes Grow Dim

Edmond, Okla.—Hopes for an appreciable southward extension of the Edmond pool four miles west of here in northwestern Oklahoma County were dim at the week end when Charles Carter et al's Suenram 1, C NE NE NE 7-13n-3w, encountered Upper Wilcox sand 81 feet lower than in the discovery well which was abnormally low. The Upper Wilcox with a small showing of oil was logged from 6760 to 6766 feet and the Lower Wilcox from 6838 to 6840 feet. It had the earmarks of a dry hole as it cored ahead.

Marathon Oil Company's Dahl 2, C NE NW SE 31-14n-3w, south offset to the largest well in the pool, was drilling below 5290 feet. Dahl 3, belonging to the same operator, was a new location, offsetting Dahl 2 to the west.

Nacoma Park

Oklahoma City.—Marathon Oil Company's Ball 1, C NW SW NE 19-12n-1w, in the Nacoma Park area of Oklahoma County, was drilling below 2925 feet and attracting considerable attention from the royalty buyers despite the fact that no horizon markers have yet been picked up. Interest in the area is spurred by performance of a well drilled several years ago by the same operator. This well is now several years old and has an accumulative recovery which measures favorably with some of the better properties in the Oklahoma City pool.

Public Utility Must Furnish Gas Says Court

Muskogee, Okla.—The supreme court held on Tuesday, January 22, that the district courts of Oklahoma can issue orders compelling a public service corporation to perform its plain duties, when it sustained the action of the Muskogee County district court in directing Southwestern Natural Gas Company to make connections with lines of Cherokee Public Service Corporation and furnish gas for that concern. The corporation commission had not acted in the matter and the court held that the commission, "does not have exclusive jurisdiction to compel a public service corporation to perform services such as are its plain duty to perform." In another decision it was held that the Oklahoma Tax Commission has the right to go into income tax returns as far back as it wishes.

To Auction Indian Lands for Lease

Muskogee, Oklahoma.—Further popularity as to future exploratory possibilities in Pittsburgh, Pontotoc, Atoka and Okfuskee counties will be given a test on Thursday, February 7, 1935, when the Five Civilized Tribes will offer at public auction oil and gas leases on a total of 16,400.57 acres comprising 171 tracts of restricted Indian lands in 18 Oklahoma counties. In addition the agency is offering in fee three Muskogee town lots on the basis of 25 percent cash at the time of the sale and the balance in three equal installments, payable one, two and three years, respectively, from the date of sale with interest at five percent on deferred payments. Minimum price is set at $200 for one lot and $300 each for the other two. No drilling or operations for oil or gas may be made until payment in full.

Pittsburg County heads the list of offerings with 43 tracts comprising 4,449.91 acres. Leasing activity in the Savannah Anticline area and in other areas of the county are responsible for the large offering. Four scattered wildcat tests are now under way in the county. Atoka County, in view of some heavy oil already found and the general activity in the Graben area to the west, is second with 3,723.67 acres in 33 tracts and Pontotoc County is third with 1,220.59 acres in 16 tracts.

Caddo County Indian Acreage To Be Sold

Anadarko, Oklahoma.—The Kiowa Indian Agency is offering by sealed bids oil and gas leases on 1,235 acres situated in southwestern Caddo County, Oklahoma. Bids will be opened promptly at 10:00 A. M., January 30, 1935. Description of the acreage offered is as follows:

	Acreage
NW¼ 8-6n-13w	160.00
N½ NE¼ 14-6n-13w	80.00
S½ NE¼ 14-6n-13w	80.00
SE¼ 14-6n-13w	160.00
SW¼ SW¼ 13-6n-13w	40.00
E½ NE¼ 22-6n-13w	80.00
N½ NW¼ 23-6n-13w	80.00
S½ NW¼ 23-6n-13w	80.00
NE¼ 23-6n-13w	160.00
N½ SW¼; SE¼ SW¼; E½ SW¼; SW¼; SW¼ SW¼ SW¼; & E½ NW¼ SW¼ SW¼ 24-6n-13w	155.00
W½ SE¼ 24-6n-13w	80.00
NE¼ SE¼ 24-6n-13w	40.00
SE¼ SE¼ 24-6n-13w	40.00

The minimum bonus accepted must be equal to appraisement of the representative of the U. S. Geological survey and the cash bonus bid is in addition to the stipulated rental of $1.25 per acre per annum. Leases run 10 years and so much longer thereafter as they produce oil and gas in paying quantities.

Burrton-Haury Pool Gets Hunton Setbacks

Hutchinson, Kansas.—Hunton lime development in the Burrton-Haury pool of northeastern Reno County received a setback during the week when three tests believed favorably located encountered large amounts of water. National Union Oil Company's Ackley 3, C NE NE SE 14-23s-4w, topped Hunton lime at 3596 feet, had a half barrel of oil and the same amount of water to 3606 feet and 3000 feet of water in the hole from 3606 to 3610 feet. It was shut down for orders at 3612 feet. This test is located on the east edge of development but its west offset, the same operator's Ackley 2, made 7710 barrels initially from Hunton lime at 3594 to 3598 feet when completed after acid treatment in November, 1934.

The second upset in the same spot was Olson Oil Company's Downie 5, C SE SE NE 14-23s-4w, north offset to National Union's Ackley 3. Downie 5 topped Hunton lime at 3599 feet, had a hole full of water at 3607 feet and was preparing to run 5 3/16-inch casing. It may be drilled to Siliceous lime, which Barnsdall Oil Company has proved to be commercially productive in another portion of the pool. Downie 2, its west offset, was completed for 6016 barrels after acid treatment of Hunton lime from 3588 to 3607 feet in December, 1934. Later in the week Gypsy Oil Company's M. E. Sabin 1, C NW NW NW 13-23s-4w, topped Hunton lime at 3611 feet, drilled one foot in and made 35 barrels of oil and 51 barrels of water. The outcome of both of these tests was a distinct surprise to those who had been watching development of the pool.

Tide Water Oil Company broadened its development program for the pool when during the week it announced starts at four locations. No. 1, C SW SW SW 12-23s-4w, is a location; No. 1, C SE SE SW 34-23s-4w, was moving in materials for a Hunton lime test; No. 2, C NE SE SW 34-23s-4w, was a Hunton lime location; and No. 3, C SE SW 34-23s-4w, is a location with chat horizon as its objective. Barnsdall Oil Company's Sabin "C" 6-C SE SE SE 11-23s-4w, one of the best leases in the pool, topped Lansing lime at 2555 feet, Mississippi chat at 3260 feet, Hunton lime at 3610 feet and was preparing to run seven-inch casing with total depth at 3617 feet.

Kansas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARTON COUNTY—		
Darby Pet. Co., Jarus 1, nw se ne 16-16s-12w	596	3351
Downing, Landern 1, nw nw se 15-19s-11w	199	3355
GREENWOOD COUNTY—		
Kite et al, Jamison 1, sw se ne 30-26s-13e	*	560
Mohawk Oil Co., Fergerson 1, cse sw 4-27s-11e	100	1816
KINGMAN COUNTY—		
Skelly Oil Co., N. Miles 5, ne se se 19-27s-10w	132	3505
LYON COUNTY—		
Sheedy et al, Atyeo 14, nw nw se 31-21s-10e (owdd)	*	2393
McPHERSON COUNTY—		
Shell Pet. Corp., Decker 6, cw½ w½ se 11-19s-2w	470	3375
Shell Pet. Corp., Lawrence 2, sw ne nw 35-19s-3w (owdd)	35	3119
The Texas Co., C. Carlson 1, ne ne nw 24-19s-3w	205	3020
RENO COUNTY—		
Barnsdall Oil Co., Sabin 6-B, se se ne 11-23s-4w	1693	3621
Barnsdall Oil Co., Sabin 3-C, ne ne se 11-23s-4w	1591	3620
Barnsdall Oil Co., Sabin 4-C, nw sw se 11-23s-4w	1221	3584
Sinclair Prairie Oil Co., Harner 1, ne ne sw 14-23s-4w	1878	3614
RICE COUNTY—		
Lebow et al, Doll 1, se se sw 20-19s-9w	349	3240
Shell Pet. Corp., Tournear 1, nw nw se 29-19s-9w	1505	3210
Gypsy Oil Co., Dotson 1, sw sw nw 25-20s-10w	*	3421
The Texas Co., S. W. Grove 3, ne ne ne 29-19s-9w	578	3217
RUSSELL COUNTY—		
Central Pet. Co., Dartland 2-B, se sw nw 4-14s-15w	624	3074
Hartman et al, Sellen 1, se ne nw 26-15s-13w	490	3300
SCOTT COUNTY—		
Atlantic Oil Co., Vaniman 1, cse ne 15-20s-33w	572	4686
SEDGWICK COUNTY—		
Shawver, Brookings 3, sw nw sw 16-28s-1e	103	3110
Dickey Oil Co., Lohkamp 1, se se nw 20-28s-1e	1443	3131

*Failures; †Junked; ‡Million cu. ft. gas.

Burrton-Haury Leads Kansas Development

Wichita, Kansas.—The Burrton-Haury pool of northeastern Reno County held its dominant position during the week although it dropped behind both Russell and Rice counties in new work. Initial production for 19 wells completed in eight counties was 13,784 barrels of which the Burrton-Haury pool yielded 6383 barrels or 46.3 percent and the various pools of Rice County, 2432 barrels or 17.6 percent. In addition to the 19 oil wells there were three dry holes completed, a total of 22 which involved 64,006 feet of drilling including 196 feet in two old wells.

Russell County led the state in new work with seven first reports; Rice County had five; Reno County, four; McPherson end Sedgwick counties, three each; Butler County, two; and Barton, Greenwood, Ellsworth, Trego and Woodson counties, one each, a total of 29 starts.

New Pool Opened In Barton County

Albert, Kansas.—Barton County appeared to have a new oil pool late in the week when Treleaven-Brimm et al's Haas 1, C SW SW SW 30-18s-15w three quarters of a mile west of here in the extreme western portion of the county, started heading at intervals of 1½ to two hours and was estimated making approximately 7,000,000 cubic feet of gas. Six and five eighths-inch casing was set at 3405 feet, a showing of gas encountered from 3590 to 3592 feet in what is believed to be top of the siliceous lime and an increase in oil and gas obtained from 3596 to 3601 feet. Top of the best pay was from this point to 3606 feet, the total depth where the hole filled 2000 feet in two hours. Gravity of the oil was reported to be 38.2 degrees corrected. Operators plan on setting 5 3/16-inch casing at about 3590 feet. The test is only about two miles southeast of the big Otis gas field of eastern Rush County and may be on the same structure.

Simplified Names Given Burrton and Haury

Wichita, Kansas.—Effective February 1, 1935, Hunton lime production in the Burrton and Haury pools of northeastern Reno County will be known as the Burrton-Haury pool for proration purposes. What has been known as the Burrton Hunton pool has a daily potential of 40,406 barrels from 14 wells and the Haury Hunton pool has 23 producers with a daily rated capacity of 52,038 barrels, a total of 37 wells with a combined daily potential of 92,444 barrels. The proration department decided to carry chat production separately. The Haury chat pool having a daily potential of 1782 barrels from 11 wells and the Burrton chat pool 10,483 barrels from 54 wells. This area with a total potential of 104,709 barrels is the largest in the state.

The Robbins pool, south of here in southern Sedgwick County appears to have been defined to the south with the abandonment of Aladdin Petroleum Company et al's Seeley 1, SE SE NE 17-28n-1e. This test was bandoned at 3348 feet in Misssisippi lime after small amounts of oil and gas had been encountered. It is, however, not conclusive since the hole was known to be crooked.

East Texas Property Transaction Consummated

Tyler, Texas.—Rio Oil Corporation, Fort Worth, has retired as an operating unit in the East Texas field through the sale of its L. Graves 106½-acre lease, M. Irwin Survey, Gregg County, with six completed wells, to O. L. Hickman and Sam K. Baird, Shreveport operators. The consideration was not revealed. Permits have been granted for the drilling of six additional wells on the property. Rio Oil Corporation, which is headed by R. H. Goodrich, did not dispose of its joint interests operated by other companies.

74 Completions; 74 Oil Wells in East Texas

Tyler, Texas.—Averaging more than 10 new oil producers daily, the East Texas field accounted for 74 completions last week in substantiating previous reports that an aggressive drilling program will be conducted by majors and independents for an indefinite period.

The field now has 15,700 completed oil wells, with an allowable of about 429,000 barrels daily. There are approximately 2250 wells classed as marginal producers, with a fixed allowable of 20 barrels daily. The remainder are prorated to 3.6 percent of their rated hourly potential flow, or an average of about 27.3 barrels daily per well for the entire field.

Completions during the past week included seven wells that failed to register a natural flow in establishing initial gauges.

Wildcat Blocks Assembled In East Texas Counties

Marshall, Texas—A number of blocks of wildcat acreage have recently been assembled for early tests in the border counties of East Texas.

In the northeast part of Marion County, Williams and Beck of Houston, Texas are planning a 6,000-foot test looking for the Rodessa fault. They have already assembled approximately 2,000 acres in the John Drummond, William Mays, John Whitney and adjacent surveys.

Ed C. Smith of Center, Texas, has assembled a 4,000-acre block in Sabine County, near Hemphill, and located in the John Haley, Sion Smith and nearby surveys.

In the Charles Grayson Survey, northeast of Jefferson, Marion County, United Gas Public Service Company recently bought 1200 acres of leases on a 10-year basis but so far as known the acreage was acquired as protection rather than for any immediate development.

K. C. Bundy continues to add to a block he is assembling for Arkansas Fuel Oil Company (Cities Service) near Jefferson in Marion County. Arkansas Fuel Oil Company's seismograph crew was recently transferred to this acreage.

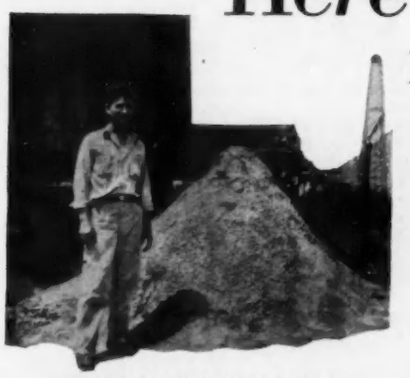
In Shelby County, just across the Sabine River from Sabine Parish, Louisiana, and opposite the Converse field in that parish J. C. Scott has assembled a 5,000-acre block in the William and A. Smith, V. H. Baunder, R. Mundy and W. S. Wilson surveys. He plans an early test.

Acid Helps East Texas Dry Hole

Shreveport, La.—Arkansas Fuel Oil Company (Cities Service) of Shreveport last week announced the treatment with acid of Taylor-Lee B-1, in the East Texas field near Greggtown, Gregg County. The test had previously been abandoned as dry, after a formation containing considerable lime streaked with sand had been logged at the Woodbine horizon. So far as known here this is the first East Texas well in or near the field to be treated

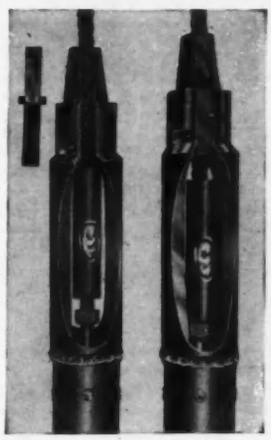
Here's Proof!

How a **MILLER** can *Clean out* Your Well



CHAMPLIN REFINING COMPANY
McCalep Well No. 1. Oklahoma City Field. Sand taken from well with a 5 inch MILLER Sand Pump.

We make no claims for the MILLER that it can't deliver. The pile of sand pictured, taken from this Champlin well by a MILLER Sand Pump, has been duplicated many times in other wells in this same field and in hundreds of wells in the principal oil fields throughout the world. The MILLER is *doing the job*—often paying for itself by increasing production on the first well cleaned.



Left: Illustration of Tool Pin Bail, shown with wire line and swivel ready for lock to be inserted holding wire line to bail. Right: Illustration of bail with wire line and swivel inserted in bail ready to run on socket. This type bail eliminates the necessity of using both a sand and drilling line, as the same swivel is used in socket with tools and connected to the eye bolt and plunger when the sand pump is run.

1. Rope Socket Neck unscrews, lock comes out so wire line can be removed from pump without cutting the wire line.
2. Bail electric welded to tube.
3. Drop forged eye bolt.
4. Long heavy plunger with ball and seat in bottom.
5. Seamless steel tube.
6. Bottom bushing shrunk to tube and electric welded.
7. Drop forged latch over heavy spring to hold bottom. Set screw for added safety.
8. Four type bottoms STAR, SAND PUMP, BAILER and CHISEL (shown in pump) Cutting edges of Chisel and Star Bottoms hard surfaced.

The MILLER is made in diameters of 2½, 3, 3½, 4, 4¼, 5, 5½, 7 and 9 inches and lengths of 20, 25 and 30 feet.

CHISEL (In Pump)
Will save the expense of running tools, as its chisel shape breaks up tightly packed sands.

Patented
No. 1370340
No. 1523604
No. 1787390
No. 1862628
No. 1866828

MILLER SAND PUMPS ARE SOLD BY SUPPLY COMPANIES EVERYWHERE
Write for Descriptive Folder and Price List

NRA MEMBER
WE DO OUR PART

MEMBER AMERICAN PETROLEUM EQUIPMENT SUPPLIERS' ASSOCIATION

The MILLER SAND PUMP CO.

General Offices and Plant
SAPULPA, OKLAHOMA, U. S. A.
Branch: Kilgore, Texas

with acid. Dowell, Incorporated, treated the well.

The acid was applied after hole was cleaned and about 600 feet of fluid rose therein.

Test Southwest of Mexia Appears Good

Tyler, Texas.—Forerunner of a new oil pool situated in Limestone County on the secondary zone of faulting to the southwest of the Mexia field appeared promising last week when David J. Crawford et al's Vol DeLong 1 encountered oil saturated sand in Woodbine section in drilling to 2801 feet. Operations were halted to arrange for casing, which will be cemented near the top of the Woodbine horizon at 2772 feet. Production test will be delayed until titles are re-checked on the block of about 1,000 acres.

Crawford, a Dallas geologist, is rated as an authority on faulted structures. Interests in the wildcat project also are held by W. A. Reiter, Mexia geologist; Leon F. Russ, Dallas; Blanchard Brothers and others. The wildcat is located in the east part of 59.3-acre tract, Pedro Varella Survey, about 1½ miles southwest of the Cedar Creek field. It is along the same trend of production that yielded Nigger Creek and Cedar Creek fields, both now depleted.

Running of a formation tester in W. G. Turbeville and Guy Warren's J. S. Ivy 1, Freestone County wildcat, to ascertain contents of Woodbine formation logged at 4803-4840 feet was scheduled for the week end after cold weather forced a temporary shutdown. Evidence of gas was reported by persons present when cores were taken in the Woodbine. The test is situated 330 feet from the east and 730 feet from the south lines of 95-acre lease, F. B. Hardy Survey, A-290, or about 7,000 feet due west of gasser completed last June by J. B. Daniel et al's P. D. C. Ball 1 after plugging back from 5003 to 4854 feet. The Ivy test logged Austin chalk at 4127-4450 feet, with an elevation of 412 feet.

The Kosse area, Limestone County, always popular with independent wildcatters because of the spectacular performance of the lone producer completed then junked shortly afterwards by the Col. A. E. Humphreys, is receiving a new test by J. Edward Mills, Fort Worth, and others on the J. B. Hunt 34¾-acre tract, Israel Woods Survey. Drilling was in progress below 2450 feet, with showings of gas at shallow depths reported by the owners. The test is about 3½ miles east by south of the famous Jones producer, and is contracted to go to 4500 feet. Sponsors of the new project made their location on the theory that a salt dome type of structure exists in the area.

Series of shallow wildcat tests drilled lately in Red River County by J. S. Abercrombie, Harrison Oil Company et al assumed a more promising outlook for production last week when J. M. Roberts 1, third test in as many months, encountered a good showing

East Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
JOINER AREA—		
Combined Oil Interests, G. W. Eaton 22 (125-ac)	10,000	3743
Delta Drl. Co., Henson 2-B (20-ac)	240	3612
East Shore Oil Co., Tom Fox 7 (40-ac)	5800	3700
W. H. Gant-Garvin-Wegener, W. P. Moore 15 (134.24-ac)	750	3595
Gulf, W. L. Maxwell 11 (57.01-ac)	8000	3709
A. H. Rayford 7 (59.87-ac)	7000	3794
Walter Shaw 5-A (53-ac)	750	3731
Guthrie Oil Corp., W. H. Frederick 1 (21.65-ac)	1000	3610
Hamilton Pet. Co.-Jenkins Bros., Wm. Jobe 19 (109-ac)	5500	3630
Wm. Jobe 21 (109-ac)	800	3630
Humble, John Bell 10 (65.55-ac)	8700	3813
Lulu DeGuerin 2 (12-ac)	10,000	3789
C. J. Thompson 18 (116-ac)	9800	3700
Joe Williams-Kirby 6 (52.94-ac)	8600	3694
Hunt Prod. Co., S. A. Plowman 6 (48.15-ac)	10,400	3750
Smith-Wilson 7-A (58½-ac)	10,000	3711
Iotex Oil Corp., Alford 3	5600	3808
Magnolia, W. W. Holland 6 (17.57-ac)	5000	3730
Lone Pine Oil Co., E. L. Pinkston 2-B (10-ac)	5600	3660
Tom Looney et al, D. M. Bradford 3 (5.27-ac)	300	3629
Marathon, H. Clay 9 (130.46-ac)	480	3673
C. L. Graham 12, Acct. 2 (134.7-ac)	7700	3664
D. Ledbetter 18 (212.48-ac)	7800	3677
J. F. Mason 15 (103.86-ac)	5900	3688
Sam Roosth et al, W. M. Camp-Ellzey 2	700	3610
Sun, J. A. Layne 9 (103.7-ac)	6000	3684
H. A. Pace 10-B (637.45-ac)	7800	3771
Texas Co., L. J. Pinkston 12 (79.45-ac)	7100	3662
Tide Water, L. J. Pinkston 17 (123-ac)	8300	3810
C. K. West et al, L. S. Sartain 3 (21-ac)	5000	3805
KILGORE AREA—		
Bay Oil Corp.-Devonian Oil Co., Moore 10 (106.63-ac)	8800	3760
Gulf, C. Brown 34 (263.52-ac)	8000	3597
S. Hilburn 60 (36.78-ac)	8200	3592
S. Hilburn 65-E (274.32-ac)	8500	3550
A. Muckelroy 20 (152.05-ac)	9000	3563
W. G. Sexton 15 (165.58-ac)	3000	3724
Harry Hanbury et al, L. B. Morse 2 (2.53-ac)	9200	3642
Humble, Tom Barton 6 (50½-ac)	7600	3730
L. D. Crim 152 (914.51-ac)	9700	3602
R. H. & W. L. Laird 10 (61.6-ac)	7800	3626
J. A. Knowles 16 (100-ac)	7000	3616
Luttes et al, Greer 1-B	7200	3660
Magnolia, M. T. Cole 12 (102-ac)	8300	3564
John Radford 28 (252-ac)	7200	3636
John Radford 29 (252-ac)	9100	3670
Sinclair Prairie, A. A. King 46-B Tr. 1 (337.6-ac)	9300	3515
Snowdey-McSweeney Co., R. H. Laird 16 (133.1-ac)	11,000	3593
J. B. Sowell et al, W. B. Walker-State 1-A (7.81-ac)	9000	3661
Sun, Hilburn-Loyd 16 (133.7-ac)	2500	3634
W. B. Walker 2 (80-ac)	4000	3566
Texas Co., J. M. Dickson 12 (88.4-ac)	7400	3620
Tide Water, Nat Bean 10 (58.06-ac)	8800	3612
E. R. D. Bivins 24 (200-ac)	8600	3647
Turman Oil Co., W. P. Brightwell 8-A (32½-ac)	10,500	3657
Wellington Oil Co., E. L. Walker 4 (17.28-ac)	8700	3560
E. L. Walker 5 (17.28-ac)	8800	3560
LONGVIEW AREA—		
H. W. Clarkson et al, J. S. O'Byrne 4 (46-ac)	250	3696
Deep Rock Oil Corp., B. Jones 12 (61.12-ac)	12,000	3590
Fain-McGaha Oil Corp., E. W. Clements 9 (50-ac)	8800	3610
M. E. Gaskill et al, Sam Kay 6 (25-ac)	12,000	3644
Gulf, S. C. Fishburn 22 (200-ac)	7000	3537
W. A. Ray 8 (813.73-ac)	480	3614
M. O. Sheppard 39 (335-ac)	7500	3498
Humble, Harris Bros. 20 (175.18-ac)	6600	3583
Magnolia, Jim Allen 9 (34.41-ac)	9600	3701
B. F. Phillips et al, L. P. League 2-A-1 (18-ac)	4600	3629
Roeser-Pendleton, Inc., Bun Rodden 7 (31.83-ac)	7000	3563
Shell, E. G. Richey 19 (169.4-ac)	8100	3620
Stanolind, C. J. Dollahite 6 (41.99-ac)	7500	3714
Texas Co., John Waddell 5 (26½-ac)	2500	3670
Thibodaux Oil Corp., A. J. Sanders 7 (45-ac)	4800	3659
Tide Water, W. Christian 9 (49.87-ac)	9300	3602
Washington Oil Corp., Wm. Cobb 7 (23.17-ac)	11,500	3587
Yount-Lee, I. Denson 8-A (61.33-ac)	8400	3660
CHEROKEE COUNTY—		
H. L. Parsons et al, Southern Pine Lbr. Co. 1-A	*	5460
LIMESTONE COUNTY—		
Pure Oil Co., L. W. Rogers 21-S	*	810

*Failures; †Junked; ¶Million cu. ft. gas.

HOUSTON
Cotton Exchange Building

EL PASO
First National Bank Building

F. G. MASQUELETTE & CO.

Certified Public Accountants

Federal Tax Counselors

AUDITS
INVESTIGATIONS
SYSTEMS
COST ACCOUNTING

of low gravity heavy oil below Georgetown lime horizon in drilling to 1180 feet. The oil is reported to have appeared in coring sandy-shale at 1120-33 feet, followed by shale. The Woodbine section was topped at 450 feet, and first Georgetown lime at 744 feet, with an elevation of 424 feet. The location is on the John Ware Survey, about eight miles north of Clarksville. The owners are credited with having made additional lease purchases on the strength of the showing.

North Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ARCHER COUNTY—		
C. W. Boller et al, Perkins-Farmer 22-A, blk 27	10	1403
Bridwell Oil Co., J. S. Dunham 1, sec 2436	30	1399
Brown & United Producers Co., W. H. Taylor 8, sec 17	*	1690
Coker et al, J. C. White 2	5	623
Continental Oil Co.-F. P. Cullum, Falls 20	35	1123
Fain-McGaha Oil Corp., F. C. Green 25	240	1198
F. C. Green 26	480	1200
Gray Drl. Co. & L. T. Burns, W. Ferguson 2, sec 2	*	663
W. B. Hamilton Pet. Co., W. P. Ferguson 1, sec 1	*	1775
Mack Oil Co., J. S. Bridwell 4	*	927
E. S. McLaughlin et al, J. S. Rater 1	12	673
Mitchell et al, J. H. Turbeville 1, blk 61	*	1080
Geo. Pace et al, C. L. Abercrombie 20, blk 156	40	1194
Perkins-Cullum Oil Co., Falls 129, blk 11	100	1136
Falls County 130, blk 11	125	1158
The Texas Co., W. Thomas 2	*	1480
BAYLOR COUNTY—		
Guy H. Warren et al, A. F. Wirz 1, sec 146	*	365
JACK COUNTY—		
P. G. Rowdon et al, H. R. Bloodworth 1	*	335
KNOX COUNTY—		
C. C. Christie et al, W. L. Moore 1, sec 87	*	2025
MONTAGUE COUNTY—		
Bridwell Oil Co., T. M. Hoben 1	*	1489
Continental Oil Co., J. W. Lawler 5	480	1743
THROCKMORTON COUNTY—		
E. G. Boardman et al, N. B. Davis 1, sec 943	*	1455
Moss & Webb, A. O. Condron 1, sec 1630	*	800
WICHITA COUNTY—		
Achning & Dudley, W. B. Herron 2, sec 9	*	1073
W. H. Bohner et al, First Nat'l Bank 15, sec 26	10	1645
Munger Bros. 7, blk 30	*	690
L. T. Burns et al, U. S. Beach-Conoco 41	5	424
First Nat'l Bank 2, sec 26	13	469
Burns & Long, First Nat'l Bank 22-D, sec 26	*	1331
Continental Oil Co., W. B. Hamilton 19	*	1203
W. B. Omohondro et al, First Nat'l Bank 1, sec 27	*	1783
John O'Neal et al, W. T. Waggoner 2-A, sec 13	*	1593
Pet. Producers Co., First Nat'l Bank 62, sec 28	18	1664
First Nat'l Bank 66, sec 28	*	474
First Nat'l Bank 67, sec 28	5	1664
WILBARGER COUNTY—		
E. P. Waggoner et al, W. T. Waggoner 2-B, sec 36	150	2575
YOUNG COUNTY—		
Jas. B. Baker et al, O. S. Perkins 2, sec 206	150	739
Bonnell Oil Co., R. E. Jones 4	*	564
Cato Bros., G. B. Hamilton 3, sec 1393	*	910
F. A. Clarida et al, J. Dyer 1	*	590
Clara M. Douglas et al, Finch 3, sec 40	35	671
Rathke Oil Co., Graham 4, sec 3401	75	918
The Texas Co., Belknap 3, sec 23	*	735

*Failures; †Junked; ¶Million cu. ft. gas.

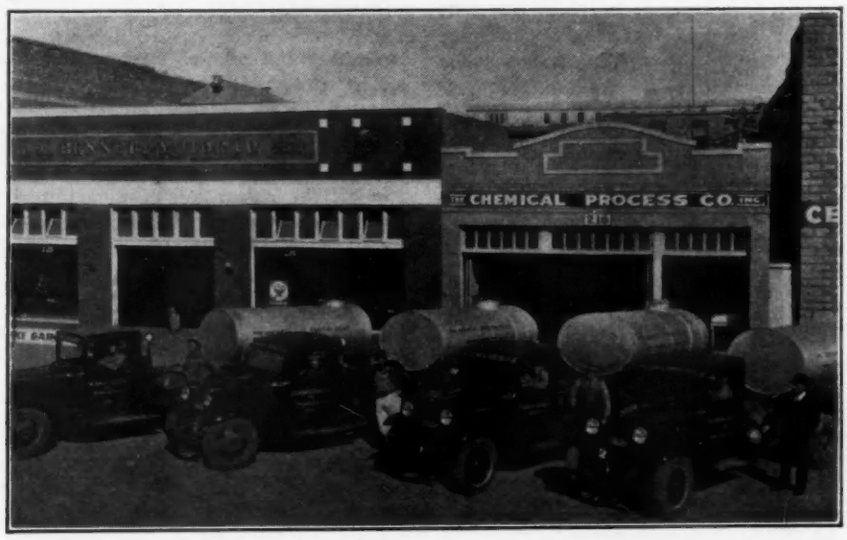
North Texas Wells Initial 2,018 Barrels

Wichita Falls, Texas.—An average of six completions daily took place in the North Texas district last week, but more than 50 percent were failures. Of the 43 completions reported there were 20 pumping and flowing wells with a combined initial rating of 2018 barrels.

To Deepen Gray County Wildcat Well

Pampa, Texas.—Deepening operations were scheduled to start late last week on The Texas Company's W. H. Taylor 1-C, Gray County wildcat completed last December at 3006 feet with a natural flow of 256 barrels of oil and 1,700,000 cubic feet of gas daily, to ascertain if the lower section of the granite wash producing horizon affords a big yield rather than to wait until nearby tests can be completed. Situated at C NW Section 52, Block B-2, H&GN Ry. Survey, on the

ACID



Practical oil men everywhere recognize the value of acid treatment for their lime wells. To avoid damage to your well, and to be most effective, treatment should be done by practical well men experienced in this line of work with equipment capable of handling any emergency which may arise.

We have treated more wells in the Mid-Continent area than any other company.

Why take a chance with anyone less experienced?

The Chemical Process Company, Inc.

Main Office: **Breckenridge, Texas**

Call our nearest service office:

Wichita, Kansas—Tel. 2-2478—Rufus Clay
Seminole, Oklahoma—Tel. 844—J. B. D. Woodburn
Big Spring, Texas—Tel. 285—D. B. Striplin
Wichita Falls, Texas—Tel. 2-4307—W. E. (Bill) Norton
Breckenridge, Texas—Tel. 206—P. W. Pitzer, C. K. West, C. F. Hogan, G. R. Whitney

south flank of the granite ridge and about 3½ miles southeast of nearest production, this wildcat was the most important strike scored in the Texas Panhandle in 1934. A late gauge revealed a flow of 105 barrels of oil in six hours after the well had been shut in several weeks awaiting pipe line connection. The Texas Company and Sinclair Prairie Oil Company control leases on the bulk of the acreage in the general area.

The Moore County helium gas reserve of the United States Bureau of Mines has another producer in process of completion to supplement the supply for the government's helium gas extraction plant in the area. Lee Bivins 2-A, C NE Section 22, Block 6, BS&F Ry. Survey, was reported to be making 9,000,000 cubic feet of gas daily while drilling at 3467 feet. First gas was encountered at 3261 feet, with increases at 3295-3307 and 3344-65 feet. In the Dumas-Sunray field, Moore County, Shamrock Oil & Gas Company's Robertson 1-B, SEc Section 165, Block 3-T, T&NO Ry. Survey, registered a small gain in oil but more than tripled its salt water flow in deepening from 3373 to 3378 feet. The well is credited with having gauged 305 barrels of oil and 625 barrels of water during the first 24 hours after deepening. It is offset in three directions by big wells completed recently.

Texas Panhandle Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CARSON COUNTY—		
Dixon Creek Oil & Ref. Co., J. C. McConnell 1	20	3302
Stanolind O&G Co., L. C. McConnell 2-A	370	3300
GRAY COUNTY—		
J. Alvin Gardner et al, E. G. Barrett 2	350	3300
Southern Pet. Exploration Co., J. G. Noel 3	280	3225
MOORE COUNTY—		
Texoma Nat'l Gas Co., J. T. Sneed 3-P	¶22	2831
WHEELER COUNTY—		
Piney O&G Co., W. S. Walker 2	75	2449
The Texas Co., P. M. Keller 4	160	2435

*Failures; †Junked; ¶Million cu. ft. gas.

Winkler County Wildcat a Failure

San Angelo, Texas.—Swabbing test given Sid Richardson et al's M. J. Hill 1, southern Winkler County wildcat, yielded only sulphur water from lime at 3702-3829 feet, thereby eliminating a bid for a deeper producing horizon in the county. The lime zone was drilled while carrying hole full of sulphur water from above, and an odor of oil was noted throughout the section. A string of 5 3/16-inch pipe was cemented at 3544 feet to make the production test, which will continue for a few days. This lower lime section is believed to be capable of producing under more favorable structural conditions, and will likely attract further exploration in the county. Hill 1 is located about two miles northeast of the Skelly-Halley pool, and in SWc SE Section 18, Block B-11, PSL Survey. A small oil producer was passed up at the 3100-foot level, producing zone of the latter pool.

Status of two semi-wildcat tests seeking oil production in sandy-lime horizon off the east flank of the Hendrick field remained unchanged last week. Fox-Butler et al's Brown-Altman 1 has made little progress in drilling by junk at 3098 feet while showing for a small oil producer. Barnsdall Oil Company has moved in machine to drill an offset. Joe C. Maxwell and Atlantic Oil Producing Company's Oscar Clapp 1, SEc NE¼ Section 37, Block 26, PSL Survey, has not developed commercial production in drilling to 3285 feet.

Flush yield of about 200 barrels of oil was credited to Humble Oil & Refining Company's J. S. Means 2, situated 1¼ miles southeast of production in the Means field, Andrews County, after heavy shot of nitro at 4557 feet. Reports indicate that the company will also treat the lime horizon with acid, which has been successful in stimulating the oil and gas flow of previous completions in the field proper. This extension well is located near C NE NW Section 11, Block A-35, PSL Survey, and considered doubtful for production because of registering a low structural position.

San Angelo, Texas.—Volume of completions in West Texas dropped off during the past week with a total of nine in eight separate counties. There were seven flowing and pumping wells, with a combined initial rating of 3160 barrels of oil and 1,250,000 cubic feet of gas. Failures were completed in Glasscock and Jones Counties.

West Texas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ECTOR COUNTY—		
Stanolind O&G Co., J. M. Cowden 13	945	4290
FISHER COUNTY—		
Sinclair Prairie, F. Steele 4	75	3356
GLASSCOCK COUNTY—		
R. P. Helms et al, G. R. Hillger 1	*	2972
JONES COUNTY—		
Southern Oil Corp. (America), L. R. Cade 2-B	*	2573
LOVING COUNTY—		
The California Co., J. G. Allen 5	205	4369
PECOS COUNTY—		
Amerada Pet. Corp., University 2-B	150	1664
UPTON COUNTY—		
Gulf Prod. Co., J. T. McElroy 105	1¼-855	2908
J. T. McElroy 107	420	2901
WARD COUNTY—		
The California Co., B. D. Durgin 20	510	2535

*Failures; †Junked; ¶Million cu. ft. gas.

Test Mile South of Jacob Pool Showing

San Antonio, Texas.—Further extension of the Jacob pool in McMullen County to the south seems likely with Stewart, Smith and Story's L. Jacob Corporation 2 coring an excellent sand and preparing to complete. The well is located nearly a mile south of the present production in the southwestern portion of the field.

It topped the shells at 843 feet, cored to 867 feet, finding an excellent saturated sand just below the shells. It likely will make 40 to 50 barrels per day.

The test is 660 feet south of Jacob 1, John McFadden Survey. The first well showed saturated sand about this level, but could not get a water cut off when casing was set. Several cement jobs failed and the well junked.

Loma Oil Company is coring L. Jacob Corporation 103-A (formerly reported as 34-A), on the southeastern side of the field, the depth being 960 feet. Longhorn Oil Company's H. L. Lark 4, Scrugham Survey, on the east flank of the field, is at 1022 feet, coring deeper into the formation. Casing already had been set. Motes and Beddingfield's H. L. Lark 3, also in the Scrugham Survey, is preparing to run casing at 968 feet.

BRAUER MACHINE & SUPPLY CO.

- Manufacturers of Oil Field Specialties.
- We specialize in manufacturing Special Equipment to your specifications.
- Equipped for general oil field repair work.
- Elastic Stop Nut, Distributors. (It stays put).

OKLAHOMA CITY, OKLA.
P. O. Drawer 1469

HOUSTON, TEXAS
P. O. Drawer 1246

Samfordyce Outlook Improved Last Week

San Antonio, Texas.—An extension of Samfordyce production one and one half miles to the east appeared possible late in the week with Harrison & Medlin et al's Garcia Land and Cattle Company 1 coring a gas sand at 2725 feet. It topped the sand at 2716 feet and has taken several cores without picking up oil saturation.

The well is 330 feet north of the Military Highway and 1000 feet from the west line of Porcion 42. It is 850 feet east of Chancellor and Hall's Garcia 1, which cored the 2700-foot sand, but was not completed at that level. The well, however, was drilled before the discovery of the Samfordyce field and there was little knowledge of the formation conditions in the area at the time.

There is a gas sand ranging from a thin section up to 35 or 40 feet overlying the oil sand, and it is possible that considerable coring will be done before saturation, if any, is picked up.

A western extension of the field of about a location was provided through the completion of Reserve Oil Company's Seabury et al 1, Tract 256, Porcion 38, which is in process of completion at a total depth of 2774 feet. It had gas sand from 2753-63 feet, oil and gas sand at 2763-69 feet, oil sand 2769-72 feet and shale at 2772-74 feet. A drill stem test from 2763 feet to the total depth flowed oil through 31 fourbles and 100 feet through the derrick in 17 minutes, registering 80 pounds pressure. Casing has been set at 2763 feet. The well is bottomed about 12 feet above the regular water level of the field.

The completion of the above oil well will tend to increase interest in development of the area to the northwest of the field. Phillips Petroleum Company completed a gasser in the Samfordyce sand about a mile northwest of production, and another well drilled by Alford Drilling Company another mile northwest and in Starr County, is said to have shown considerable gas in the Samfordyce sand. As a result, it is likely that there will be a number of tests drilled down dip from these gassers in an attempt to develop oil production as has been the case in the rest of the field.

Reynosa Oil Company's F. B. Guerra 1, northeast of the discovery well and in Tract 254, Porcion 39, showed for a large gas well and has been plugged. It cored sandy shale from 2758-68 feet, and went into gas sand to a total depth of 2805 feet, where a drill stem test netted 400 pounds pressure in five minutes. It was cored deeper, but failed to pick up saturation. It has been abandoned at 2853 feet in shale.

Four oil producers were completed in the field during the week, bringing the total number to 29. In addition, several gas wells have been completed. As the week closed, there were 12 active operations or rigs in the field.

South Texas New Fields Are Given Approved Names

San Antonio, Texas.—Names of recently discovered fields of South Texas were definitely approved at the meeting of the San Antonio Geological Society here January 7. These names were selected by the Nomenclature Committee of the Geological Society as well as the National Oil Scouts Association, South Texas division. The committee is headed by Herschel H. Cooper.

The names of other fields in the territory are being revised and will be announced within the near future. Former names were selected about two years ago by the organization and new field names added to the list as they were discovered.

The names follow:

Bastrop County: Carroll, replacing Sun.

Bee County: Caeser; Dirks; Grayburg, replacing Mineral or Kimball; West Tuleta.

Bexar County: Lone Oak, replacing Meaders and Cantu; Von Ormy, replacing Hoch.

Calhoun County: Port Lavaca.

Duval County: Colmena, replacing Mills-Bennett; Hoffman, replacing Conway-Campbell; Labbe; Loma Novio, replacing Humble, Ruiz.

Hidalgo County: Samfordyce.

Jackson County: Vanderbilt.

Karnes County: Burnell, replacing Marrs-Choate.

Live Oak County: McNeill, replacing Dinero.

McMullen County: South Calliham, replacing Carpenter and Claunch.

Refugio County: Tomoconnor, replacing Quintana.

San Patricio County: Sinton, replacing Plymouth.

Starr County: Barbacoas, replacing Jeffries-Lambeth; Cuevitas, replacing Sun-Guerra.

Travis County: Manda, replacing Kimbro, Peterson.

Victoria County: Coleto Creek, replacing Raisin; Fordtran, replacing Texas and Foster.

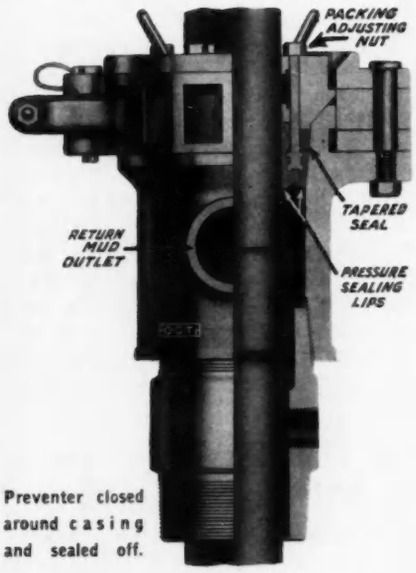
Zapata County: Lopena, replacing Morrison; Comitas, replacing Haynes Ranch.

2 PROVEN TOOLS

O-C-T Type "D" Preventer
O-C-T Type "L" Bradenhead

COMBINED

TO PROTECT YOU WHILE DRILLING; RUNNING OR LANDING PIPE



Preventer closed around casing and sealed off.

Drill safely . . . . then swing your casing before cementing . . . eliminate backing out last joint to nipple up . . . avoid hanging pipe string on elevators or rotary slips while cement hardens . . . handle the whole job with this safe, practical combination.

Casing suspended on bradenhead packing, ready for cementing.

Selling through Supply Stores.

OIL CENTER TOOL CO.

QUALITY O-C-T PRODUCTS

HOUSTON, TEXAS, U.S.A.

"EVERYTHING FOR THE CHRISTMAS-TREE BUT THE VALVES, WHICH YOU SPECIFY"

Development Work Continues at Premont

San Antonio, Texas.—Magnolia Petroleum Company is continuing development work at Premont, Jim Wells County, in an attempt to develop a commercial oil field. Its sixth well is preparing to rig up. A. A. Seeligson 6 is located 660 feet west and 330 feet south of Seeligson 3, V. Canale Survey No. 218.

Magnolia Petroleum Company's Seeligson 5 has been abandoned at 4003 feet, after testing salt water and oil in a sand at 3634-46 feet.

Sinclair Prairie Oil & Gas Company's Seeligson 1-A, in Survey No. 215, relief well for the wild crater, which burned for several months, has been conditioned and is drilling deeper. This well was commenced about 400 feet from the Seeligson 1, and was drifted into the crater at 2405 feet, where mud was pumped to kill the wild well. It will test several interesting sands encountered in the first test.

Cole Field Has An Active Week

San Antonio, Texas.—One new producer was added to the 3400-foot sand and another to the 2800-foot horizon in the Cole field of Webb and Duval counties during the week. In addition, another operator entered the field with a development program.

Cole Petroleum Company's Benavides 89, Callaghan Homestead tract, flowed 20 barrels per hour through ¼-inch choke from 3407 feet. It had sand at 3385-91 feet and another sand at 3403-7 feet. Derrick has been skidded to Benavides 90.

O. W. Killam's A. M. Bruni 30 showed too much gas at 3413 feet and plugged back to a shallower gas sand, perforating casing at 2277-89 feet, where it was completed for 20,000,000 cubic feet per day, showing a rock pressure of 700 pounds.

Just across the Webb County line in Duval, Magnolia Petroleum Company's B. Benavides 6, Block 485, Hale subdivision of the Arispe Grant, made 15 barrels an hour, flowing through ½-inch choke. It has the sand at 2796-2800 feet.

Peerless Oil and Gas Company and Lamar G. Seeligston have made location for A. M. Bruni Estate 1, northwest corner of a 138-acre tract in Section 6, Foltz subdivision of the Arispe Grant. Trinity Drillers, Inc., has the drilling contract.

There are ten active operations in the field at this time.

New Well in the Coleto Creek Field

San Antonio, Texas.—Plummer Drilling Company's E. Terrel 2-B, in the Coleto Creek field, Victoria County, is flowing about 50 barrels of oil and showing considerable gas through 3/16-inch choke. It shows a working pressure on tubing of 900 pounds. The well logged the sand at 2822-44 feet.

In the same field, Nutex Oil Company's Zimmer 3, has the sand at 2810-15 feet. It is nippling up to complete.

Third Important Area May Be Opened in Bee County

San Antonio, Texas.—A third important producing area for Bee County is apparent following the showing on drill stem test on the Pettus sand in L. W. Stieren's W. H. Fox 1, William McGill survey, about four miles northwest of the Pettus area. On a 7½-minute drill stem test from 3428-36 feet, the well developed 375 pounds pressure. It is being cored deeper into the sand and will be tested again. The well is in the southwest corner of the 120-acre tract in the William McGill survey, and 1330 feet north of Worth Oil Company's Rutledge 1.

The Worth well several months ago showed for an oil producer on a drill stem test at 3424 feet, but drill stem was stuck in the hole and it has been fishing for some time. Practically all the pipe has been removed and it is expected to complete the job within several days. This test had sandy shale from 3393-3404 feet and sticky shale and streaks of sand from that depth to 3424 feet, where the well is bottomed.

Several miles farther north, an active drilling campaign is in prospect for the Caeser field. Caeser Oil Company is rigging up R. E. Miller' 3, direct north offset to Frim Oil Company's Grissom 1, and has a location for a diagonal northwest offset. Luling Oil and Gas Company is nearly ready to spud in J. T. Hudman, direct west offset to the Firm producer.

Firm Oil Company several days ago completed the Grissom for probably the largest producer ever completed in Bee County. It is estimated at upward of 2500 barrels per day, but is pinched to a 150-barrel allowable.

El Toro Oil Company has started Gardner 1, 870 feet from the south line and 920 feet from the east line of a 106-acre tract and northeast of the Grissom well.

Luling Oil and Gas Company's B. B. Ruhman 5-B, on line of Blocks 39-40, P. B. Butler subdivision, flowed at the rate of 20 barrels an hour through ¼-inch choke from 3074-86 feet, the largest producer completed in the northeastern portion of the field.

In the West Tuleta field, activity continues unabated. Mills Bennett is completing Tuleta Mercantile Company 1, and Blanco Oil Company and Al Buchanan are completing P. Perez 2-A, a work-over. Both wells are on the southeast flank of the field and add new territory for development.

Heyser, Heard & Walton's Walton 1, lot 1, W Section 20, about one-half mile southwest of production, is rated

Perfection is no Trifle

• Custom tailored clothes are a distinct indication of the value a man places on his personal appearance.

• In Hamilton Brothers custom tailored clothes this quality reaches its highest standard. To obtain perfection of fit, design, finish, requires not only the skill of a master craftsman, but time to produce. And because we carefully give each tailoring operation the meticulous care it requires, our suits at $85.00 up are a sound investment in quality.

Hamilton Bros.
Established 1883
510 MAIN ST., HOUSTON, TEXAS
"THE WELL DRESSED MAN KNOWS HAMILTON QUALITY"

at 16 barrels an hour through 3/16-inch choke from a total depth of 3966 feet. It topped Pettus sand at 3949 feet, but production is coming from 3957 feet to the total depth.

Hidalgo County to Get Another Deep Test

San Antonio, Texas.—Union Sulphur Company has started another deep test on American Rio Grande Land and Irrigation Company block in Hidalgo County. The first two wells were abandoned after drill stem stuck in the hole and could not be recovered.

The new test is 400 feet from the south line and 600 feet east line of Lot 2082, Block 86, North Capisallo district, Llano Grande Grant. It is only 200 feet west of ARGL & ICo. 2, which was junked and abandoned at 8044 feet.

The company is drilling a series of deep tests on several geophysical prospects in the Rio Grande Valley, running two rigs at a time.

Two Duval County Wildcats Showing

San Antonio, Texas.—North Kohler field, Duval County, regained the spotlight last week with a wildcat showing for possible production in the Government Wells sand. Peacock & Eckhart et al's Southerland 1, NW SW NE Section 188, on the northeast side of the field, cored sand at 2361-66 feet and set casing without making a drill stem test.

This area, located about ten miles southwest of the Government Wells Group, has been a disappointment to date. It has several high-pressure gas sands, but only a couple of very small oil wells have been the result of considerable drilling. This new test may pave the way to additional prospecting and the opening of another Government Wells sand field.

On the east side of the Government Wells field, another area was giving

South Texas Completions

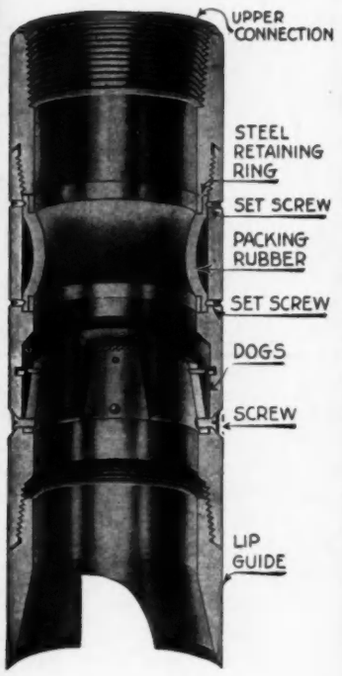
Company, Well and Location	Init. Prod. Bbls.	Depth
BEE COUNTY—		
Heyser, Heard & Walton, Walton 1, lot 1, sec 20 (W. Tuleta)	450	3966
Luling O&G Co., B. B. Ruhmann 5-B, blk 39-40, P. B. Butler sub, Hodge sur (Caeser)	500	3086
BEXAR COUNTY—		
Lloyd Bender et al, Evans 1, 1200 ft wl, 200 ft nl 313.7-ac tr, de la Garza sur	*	1495
Richcul Oil Co., Juan Barragan 1, James Simpson sur No. 59 (Von Ormy)	4	750
H. J. Trawalter et al, Fee 7, S. Jett sur No. 53, (Von Ormy)	3	660
DUVAL COUNTY—		
Magnolia Pet. Co., Brennan-Benavides 6, blk 485, M. E. Hale sub, M. Arispe Gr., just across Webb County line (Cole)	500	2806
Magnolia Pet. Co., Hahl-Southland 12, nw sec 61 (Gov't Wells)	250	2325
Russ Pet. Co., Hahl 6-C, sw nw sec 62 (Gov't Wells)	240	2343
Salt Dome Oil Co., L. B. Moody 1-B, sec 60, (Gov't Wells)	240	2382
Smith & Story, Lundell 12, sec 48 (Gov't Wells)	45	2265
EDWARDS COUNTY—		
T. A. Ohlhausen, Turney 1-B, 1622 ft nl, 660 ft wl, sec 176, CCSD& RGNG Ry sur, blk NW (replacement for 1-A† junked hole)	*	880
FAYETTE COUNTY—		
Colorado Co. (Richardson et al), Andera 1, 656 ft e of center of wl of lease, James Winn sur	*	2900
HIDALGO COUNTY—		
Alamo Drlg. Co., F. B. Guerra 1, Tr. 254, Por 40, (Samfordyce)	300	2764
Cortez Oil Corp., (Weekley), C. E. Smith 2, Tr 278, Por 40 (Samfordyce)	300	2764
Reynosa Oil Co., F. B. Guerra 1, Tr. 254, Por 39 (Samfordyce)	*	2853
Rogers O&G Co., F. B. Guerra 1, Tr. 254, Por 40 (Samfordyce)	500	2764
Showers & Moncrief, Inc., C. E. Smith 1, Tr. 3-B, Por 41 (Samfordyce)	250	2762
Union Sulphur Co., American Rio Grande Land & Irr. Co. 2, 400 ft sl and el lot 2080, blk 86, N. Capisallo Dist., Llano Grande Gr.	†	8044
JIM WELLS COUNTY—		
Magnolia Pet. Co., A. A. Seeligson 5, 1320 ft n, 660 ft No. 2, V. Canale sur No. 218 (Premont)	*	4003
Sinclair Prairie O&G Co., A. A. Seeligson 1, K&K Sur No. 215, cratered well (Premont)	*	4032
Walsh & Long, Allen Land & Cattle Co. 1, 150 ft nwl and swl lot 1, blk B, Bode sub (Sandia)	*	2982
KARNES COUNTY—		
American Liberty Oil Co., Otto Von Roeder 1, 330 ft nel, swl of 204-ac tr, Johnson sur (Burnell)	¶40	3374
McMULLEN COUNTY—		
L. D. Ormsby, L. Jacob Corp. 2, 600 ft nl, 700 ft el SE W. H. Jacob sur No. 5 (Jacob)	*	930
TRAVIS COUNTY—		
Humble O&R Co., Buck Christian 3, 330 ft swl, 1650 ft sel 127-ac tr, J. P. Kemp sur (Manda)	*	800
VICTORIA COUNTY—		
Plummer Drlg. Co., E. Terrell 2-B, Manchola sur (Coleto Creek)	75	2844
WEBB COUNTY—		
Cole Pet. Co., Benavides 89, Callaghan Homestead tr (Cole)	700	3407
O. W. Killam, A. M. Bruni 30, sec 6, Foltz sub, M. Arispe Gr. (Cole) pb 22289 ft	¶20	3413
WILLIAMSON COUNTY—		
Ogden & Reed, Zeischang 1, H. White sur (Byersville)	*	893
Ray Oil Co., J. M. McDaniel 1, C. Botello sur	*	....
ZAPATA COUNTY—		
Nordan Morris, Y. & R. Ramirez 1, blk 7, share 20, Por 19 (Lopeno)	¶10	2095
Sulgrave Oil Co., Gutierrez 1, sec 162 (Martinez)	¶15	1688
Venture Oil Co., (Morrison) Vela 1, 1320 ft swl, 660 ft sel blk 5, re-plat of Jamison sub, Por. 20 (2 mi n Lopeno field)	¶12	2225

*Failures; †Junked; ¶Million cu. ft. gas.

THE
RIGHT TOOL
ON THE JOB

available for immediate use will eliminate practically all the long-drawn-out, hazardous and expensive

FISHING JOBS



The GRAY OVERSHOT

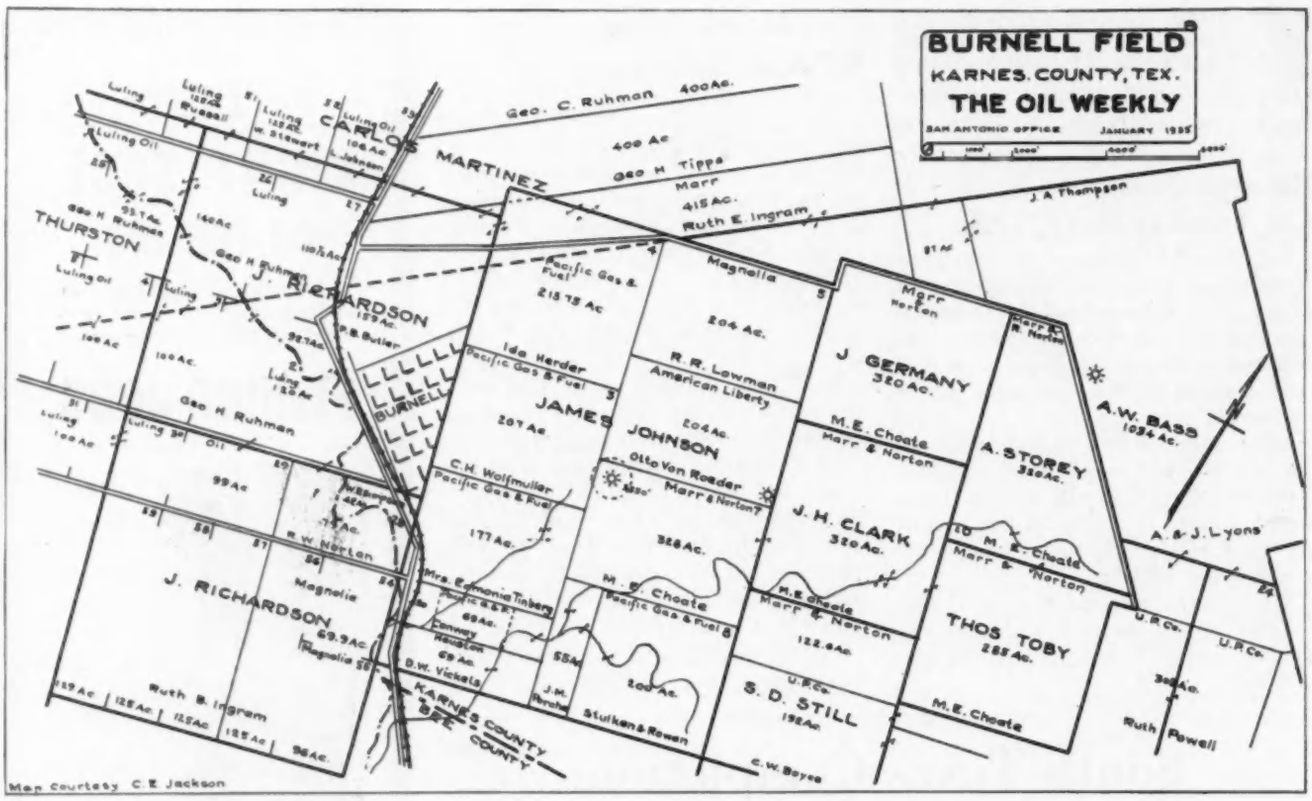
is a fool proof, efficient tool which will recover practically 100% of all drill stem fishing jobs, if run before pipe has time to stick.

POSITIVELY RELEASABLE

Keep a GRAY OVERSHOT on your derrick floor at all times, ready for running down and picking up twisted off pipe before it has gotten stuck . . . avoiding a long-drawn-out, hazardous, and costly fishing job, or even the loss of the hole.

Phone Wayside 2111

GRAY
TOOL COMPANY
Houston, Texas.



promise of developing a new oil field. Humble Oil & Refining Company's Mucio Vela 1, SE N Section 42, in the Loma Novio area, made a drill stem test at 2788-96 feet, where it showed 4000 feet of oil and developed 45 pounds pressure through ⅜-inch choke in 17 minutes. There was no water. At last reports, the well was drilling out plugs.

This well is a northwest offset to Humble Oil & Refining Company's Ruiz 1, which recently was completed at 2790 feet, pumping about 100 barrels of fluid per day, half 25 gravity oil and half salt water. Production is from just below the Government Wells sand, it is said.

Magnolia Petroleum Company's F. W. Herbst 2, northwest corner Section 70, and one half mile southeast of the Humble well, is drilling at 2360 feet.

New Burnell Field May Be Large Structure

San Antonio, Texas.—A large structure is being developed in the new Burnell field, Karnes County, where the third gas well has been completed out of the same number of tests drilled. The wells are on a two-mile northeast-southwest line.

The newest gasser is American Liberty Oil Company's Otto Von Roeder 1, east corner of a 204-acre tract in the James Johnson Survey, nearly one half mile east of the discovery well. It cored the sand higher than the discovery well and was completed as a 40,000,000 cubic foot gasser, showing a pressure of 1325 pounds on the casing. With an elevation of 435 feet, this well logged the producing formation at 3350-74 feet.

Farther east and south, Marr and Norton, drillers of the discovery well, was preparing to spud in M. E. Choate 2, southwest corner of the 320-acre A. Story Survey. It is on the extreme southeast flank of the structure and should have an important bearing on the future outcome of the field.

While all development thus far has shown gas, it is expected that future work will define oil production. Cores in these wells have shown some saturation and the wells have developed damp gas after completion.

The block is controlled almost entirely by Marr & Norton, American Liberty Oil Company, J. A. Thompson and Pacific Gas and Fuel Company.

Another Failure in Splendora Area

Houston.—Another failure was added to the Splendora field of Montgomery County when R. R. Frankle's C. Neff 1, Walker County School Land Survey, was abandoned at 6037 feet at the close of the week. The operators took a core from 6017 to 6037 feet and recovered eight feet of sand which showed salt water with a trace of gas and distillate.

CURTIN CENTRIFUGES
• NEW IMPROVED MODELS •
For Testing Petroleum A. P. I. and A. S. T. M. Standards
Designed to meet all requirements of **A.S.T.M. Standard Method D-96-30** and **A.P.I. Code No. 25,** these centrifuges are of the heavy duty type, simple in design, require no special care, and will give continuous service over a long period of time. The gear ratio and the throw of the crank have been designed to produce the required speed with the least effort consistent with good mechanical construction.

• A descriptive folder with specifications and prices of our complete line of centrifuges and tubes sent on request.

MANUFACTURED BY

No. 3480 W.H. CURTIN & COMPANY, INC.
HOUSTON, TEXAS

Cleveland Outpost Test Showing for Producer

Houston.—The second operator to enter the Cleveland field of Liberty County was Black Gold Production Company when this company tested 110 feet of oil on a drill stem test from 5824 to 5839 feet during the past week.

The test was made in four minutes through a quarter-inch choke on bottom and a 3/8-inch on top with a 200-pound pressure. The well had eight feet of sand. After setting seven-inch casing the test was being prepared to wash in at the close of the week.

Not only will another operator be added to the field but the field be extended approximately 556 feet to the west.

To the southeast of the Cleveland field it is reported the operators that drilled Lynott Buffon 1, J. Robeson Survey, Liberty County, to 7511 feet and abandoned it are trying to promote another well for the area. If successful, the well will be drilled in the southeast corner of the Lynott Buffon tract in the J. Robeson survey. Two major oil companies have geophysical crews now working in the area. Across the river, the exciting lease play that has been in progress for some time has quieted down with one of the major oil companies having assembled a 5000-acre block.

Jefferson County

Houston.—Interest has quieted down in the Nome area of Jefferson County, when Sun Oil Company's Long 1, 2½ miles southwest of Nome tested salt water after swabbing down to 4000 feet during the past week.

Recently the well was swabbed down to 6000 feet and the well showed a pressure of 800 to 1000 pounds, but the operators decided to reset the tubing. It is recalled that the company set 300 feet of screen. When the tubing was pulled it was found to contain over 300 feet of shale. At the close of the week the well was shut down waiting on orders.

Lease Play in Fort Bend County

Houston.—Ft. Bend County is receiving one of the most exciting lease plays in its history with several major and independent companies taking large blocks or protection acreage. In the triangle of Clodine, Richmond and Missouri City, the area is being leased for from three to six dollars per acre. In the area of Beasley three large blocks were taken during the past three months and one operator took 10,000 acres in the area on a geophysical option with three dollars selection. The Needville area is again receiving a warm play with Humble Oil & Refining Company, Shell Petroleum Corporation and Pure Oil Company taking the lead in the area.

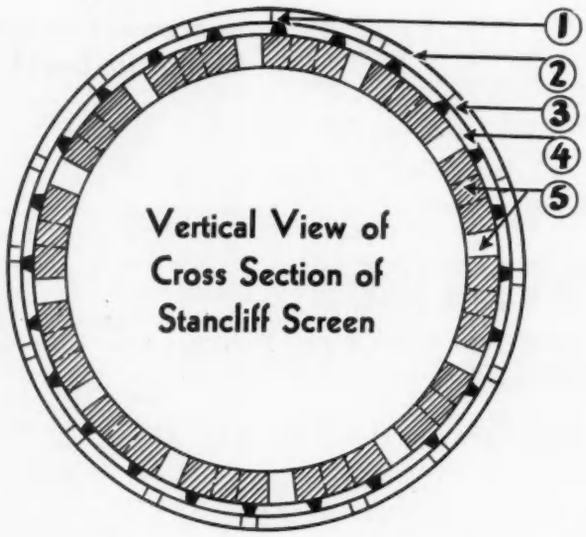
To the east of Richmond in the area of Turnbull & Irwin block which was reported some time ago when a large number of tracts were taken on the State Prison Farms, the operators have added the Herman Hospital land which consists of about 1000 acres to their block. The reported consideration was from $10 to $15 per acre.

Esperson Dome Extended Slightly to Northwest

Houston.—The Esperson field of Liberty County was extended to the northwest approximately 600 feet when General Crude Oil Company completed Davis 9 for 21 barrels of 33 gravity oil per hour from 5872 feet. The flow was through a quarter-inch choke with a tubing pressure of 250 pounds and casing presssure 470 pounds.

The operators have made location for Davis 10, 2000 feet from the east line of the lease in the D. Kokernut Survey.

Stancliff Patented Screen



1. **Full depth, full width spacing lugs** rolled into the wrapping wire make the gauge and maintain it.
2. Wire wrapping. Galvanized Steel, Brass, Admiralty, Stainless Steel and pure Nickel Wire, can be furnished.
3. **Ribs are laid on the outside of the pipe,** and are of the same metal as the wrapping wire. **Makes whole surface screening surface.**
4. **Flow channels** are formed by the ribs to increase screening efficiency and reduce fluid velocity. The clearance space provided makes STANCLIFF SCREEN easy to clean.
5. Perforations in the pipe are staggered with one row of holes under each flow channel.

•

HOWARD SMITH COMPANY

1201 SAWYER ST. AT RAILROAD AVE.

HOUSTON, TEXAS

Phone Fairfax 6363 P. O. Box 688

Start Marginulina Test in Manvel Pool

Houston.—Bowels & Borsedi, discoverers of the new Marginulina sand on the north flank of the Manvel field of Brazoria County, have made location for Norvell 2, center of Lot 57, H. & T. B. Survey, Section 23, and Norvell 3, center of lot 46, H. & T. B. Survey, Section 23. At the close of the week the operators were rigging up on number 3.

Norvel 1, the discovery well, was making about 140 barrels per day through a 7/64-inch choke with a tubing pressure of 750 pounds and casing 850 pounds during the past week. The oil has been turned to The Texas Company's pipe line that runs near the well.

The Texas Company has made location for Gulf Coast Loan Company 3, 247 feet north and 441 feet west of the southeast corner of lot 37, H. & T. B. Survey, Section 23. Derrick is being moved in.

To the northwest of the discovery well and the extension test, it has been reported Mid-Texas Oil Company purchased two lots near the well for $100 per acre. The two lots that were purchased consisted of 20 acres.

To the east of Arcola and west of Manvel there is a block of acreage being assembled by several independent oil brokers who are paying from one to two dollars per acre. Several of the major oil companies have worked this area with geophysical instruments. It is thought that the acreage is going to a major oil company.

Say Sam,

Have you seen those new Houston Ready-Cut houses Blanks are putting up for their men? My wife saw them and wants to know why you fellows won't furnish us homes like that.

They're roomy and comfortable; warm and dry. They're built soundly and look like a house that will stand for years.

We agree with your friend, Sam. Give your men Houston Ready-Cut House Company homes. Their durability and portability makes them economical; their solid construction protects your workers' health.

Get our catalog and see how well our houses are built.

HOUSTON
READY-CUT HOUSE CO.
HOUSTON
TEXAS

Succeeded in Setting Choke in Eureka Well

Houston.—Operators of the discovery well for the Eureka field of Harris County were successful in installing a 3/16-inch bottom-hole choke in Laura Lackner 1, during the past week and brought the well in for 45 barrels of distillate per day.

C. B. Bunte's Laura Lackner 1, encountered trouble placing the bottom-hole choke in the well due to the condition of the hole which had sanded up. After letting the well blow for some time the well finally cleaned itself. On January 23, 1935, the well made, on a 24-hour gauge, 43 barrels of distillate with a 2700-pound closed in pressure. On January 24, the well made 47 barrels of distillate. On January 25, the well was making approximately 45 barrels daily with a tubing pressure of 2700 pounds and casing pressure was 2750 pounds.

The operators are moving the derrick from the discovery well to drill Means & McGhee's Laura Lackner 1, 400 feet from the south and east line of 154-acre tract in the Wm. P. Morton Survey.

To the southwest of the field and centering around the old Hamil Drilling Company's C. W. Walker 1, which was abandoned at 5064 feet some time ago it is reported that parties are assembling a drilling block. The well will go to the Conroe sand which is producing in the Eureka field.

Z. A. MITERA of Poland is actively engaged in geophysical work in the Carpathian Foreland following the taking of his D. Sc. degree at the Colorado (U.S.A.) School of Mines last year.

Katy Well Drilling Ahead in Cockfield

Houston.—Stanolind Oil & Gas Company's Thorp 1, west of Katy, M. Bennett Survey, Waller County, was drilling below 7397 feet in hard sand rock at the close of the week end on a core from 7228 to 7232 feet had a nice sand with a good distillate taste, from 7345 to 7358 feet a good showing of gas was noticed. To date the well had not picked up any salt water sand. This is rather unusual for the Conroe trend for a test so deep in the Cockfield formation.

To the north and west of this test and in the Raccoon Bend field, Austin County, Humble Oil & Refining Company is drilling at 6879 feet in Woodley 11-X, in the Wm. Harvey Survey. This is another interesting test for the Conroe trend. Both wells are trying to pick up a good body of sand in the Saline Bayou which is becoming more prominent along the trend.

11 Producers Among 21 Texas Coast Completions

Houston.—There were 21 completions reported along the Texas Gulf Coast during the past week and of that amount 11 resulted in producing wells with a combined initial production of 5407 barrels of oil per day. There were two gas wells reported in the area making an initial volume of 2,500,000 cubic feet of gas daily. The remaining eight wells were failures.

Will Drill a Deep Wharton County Test

Houston.—The Texas Company has made location for a deep test on the Pierce Estate land in Wharton County which has witnessed an exciting lease play during the past year. This prospect is considered one of the best on the Gulf Coast and the wildcat will be watched with much interest.

The well will be known as Pierce Estate 1, and is located 4850 feet south, 34 degrees east and 4300 feet north and 56 degrees from the west corner of tract A, I. & G. N. Survey, Section 38. The well is to the southeast of the town of Pierce.

This area has been worked at intervals all during the past week by The Texas Company, Humble Oil & Refining Company and several other independent exploration companies. The companies worked the area with Torsion balance, seismograph reflection and pendulum.

In the area of El Campo, Humble Oil & Refining Company has an 8000-acre block in this area which was taken

from the Rio Oil Company's 18,500-acre block. Between the town of El Campo and Pierce the area has been active during the past week with a large lease play in progress.

Tomball Extension Test Is Showing

Houston. — Humble Oil & Refining Company's A. F. Gebbert 1, C. W. Hahl Survey, Tomball field, Harris County, was running tubing to complete at 5566 feet. If this well proves a producer it will extend the field approximately 1500 feet south. Two oil sands were encountered, one from 5514 to 5538 feet and the other from 5561 to 5563 feet.

Drilling in the Tomball field is approaching the town of Tomball and it is reported one major company has made location in the city limits.

The Tomball field now consists of 138 wells completed, 35 being gas wells, 103 oil wells and 13 dry holes. The accumulative production for the Tomball field is over 1,300,000 barrels of oil. The productive acreage is now near to 12,000 acres which is expected for the coming year to surpass that of Conroe field in Montgomery County.

Texas Gulf Coast Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARBERS HILL—		
Bennett Prod. Co., Wilbert 6-A (wo)	640	5264
Sinclair Oil Co., Wilburn 18	458	5520
ESPERSON—		
General Crude Oil Co., Davis 9	504	5872
EUREKA—		
C. B. Bunte, Laura Lackner 1 (wo)	45	7695
HASTINGS—		
Stanolind O&G Co., J. W. Surface 1 (wo)	396	6003
HULL—		
Republic Prod. Co., Dolbear 140 (wo)	600	2376
HUMBLE—		
Wilson Oil Co., H. C. House 3	*	2763
MANVEL—		
The Texas Co., A. Dalomin 1	*	5279
T. L. Ellis 2	*	5257
Houston Oilfield Association 13	¶1	3990
Houston Oilfield Association 15	216	4050
PORT NECHES—		
The Texas Co., Kuhn 6	624	5939
RACCOON BEND—		
Humble O&R Co., Sanders 8	10	3200
Sherrod 9	*	4140
Wilson 6	1464	4146
SAN FELIPE—		
The Texas Co., Jones 1	*	5017
TOMBALL—		
Humble O&R Co., Martins 3-A	450	5590
The Texas Co., Scherer 4	¶1½	5607
HARRIS COUNTY—		
American Liberty Oil Co., Graves 1, 1403 ft n of s line and 467 ft e of w line of J. W. Bryan sur	*	6626
W. U. Paul, House 1, 2200 ft n and 1000 ft e of NEc of E. E. Benson sur, on the M. Magruder sur	*	7329
MADISON COUNTY—		
Tex. New York Dev. Co., Ferguson State Farms 1, J. Pierson sur	*	2515

*Failures; †Junked; ¶Million cu. ft. gas.

Hasting Discovery Well Recompleted; Better Flow

Houston.—Stanolind Oil & Gas Company's J. W. Surface 1, discovery well for the Hasting field of Brazoria County, was recompleted during the past week for approximately 396 barrels per day from 6003 feet.

The well originally was completed at 5990 feet for five barrels per hour through a 3/16-inch choke. Nine and five eighths inch casing was set at 5975 feet. To increase production and cut off a lot of the gas pressure the well was carried down to 6003 feet where 9⅝-inch casing was set at 5985 feet, approximately 10 feet lower than the first setting. The well started flowing about 10 barrels per hour through a 3/16-inch choke with a tubing pressure of 700 pounds and casing 1000 pounds. During the week the operators changed the chokes to various sizes and on January 25, 1935, ending at 7 a. m. the well made 396 barrels on a 24-hour gauge. The first four hours the well was on a 3/16-inch choke and was changed to a 5/16-inch choke for the next 20 hours. Tubing pressure was 925 pounds; casing 1000 pounds.

The same operators' S. Paul 1, 2000 feet south and a little north of the discovery well, A. C. H. & B. Survey, was drilling below 820 feet and W. J. Miller 1, 2250 feet east of the discovery well was drilling plugs at 1545 feet.

Wildcat Blocks Taken In Trinity District

Houston.—In Houston County, Sterling Oil & Refining Company has made location for Brouton 1, center of a 3000-acre block in the M. Clark Survey to the northwest of the Kittrell field and near the Trinity River.

To the southwest of Grapeland, in Houston County, T. C. Hadley et al have taken a 3000-acre checkerboard block centering around the D. McLean Survey for a Woodbine test to start within 90 days.

In Nacogdoches County, McAuliff & Pace who have a block near the town of Cherion have turned it to the Sea Shore Oil Company who will drill a wildcat in the future.

Darrow Extension Well Still Testing

Lake Charles, La.—Humble Oil & Refining Company's Gumble 2, Section 33-10s-2e, one mile southwest of production

Showing high pressure type, for slush pump service . . . Made also in low pressures for gathering pump or similar service.

Include 10c FOR NAILS

in your 1935 budget!

A dime buys two pounds of common nails, the only part damaged when this Shear Relief Valve functions. Sounds like a ridiculously low maintenance cost for a piece of equipment which is protecting pumps and pump parts involving a small fortune, but that's the case.

Learn the whole story of this revolutionary valve which relieves over-pressure by shearing a nail . . . which has stood the gaff in hard field tests for two years. Write us for descriptive pocket folder, or refer Page 69 your 1935 Composite Catalog. Then question one of the many users throughout the U. S.

FLUID-PISTON SLUSH PUMPS
ABERCROMBIE PUMP CO.
GULF BLDG. HOUSTON TEX.

in the Darrow field, Ascension Parish, was swabbing at the close of the week to try to make the well flow and bring it in for production.

During the past week the well made 281 barrels of oil through a 3/8-inch choke from 5716 feet and after making this amount of oil the well went dead.

With the completion of this test the field will be extended to the southwest one mile.

Four Louisiana Coast Completions Last Week

Lake Charles, La.—Completions were small in number during the past week on the Louisiana Gulf Coast with only four reported and of that amount two resulted in producing wells with an initial production of 2062 barrels daily. The other two completions were failures.

Feltex Oil Company Buys Leesville Lease

Lake Charles, La.—It was reported in the January 14 issue of THE OIL WEEKLY that Feltex Oil Company was on a deal with Bowles Oil Company who operates in the Leesville field of La Fource Parish, to purchase the latter's holdings in the area. The deal was consumated during the past two weeks and Feltex Oil Company is reported to have paid $450,000 in cash and oil, $50,000 cash immediately and $100,000 February 1, 1935. The remainder was to be paid out of oil.

South Louisiana Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
LEESVILLE—		
Lincoln Oil Co., Visier 6	900	3879
WHITE CASTLE—		
Shell Pet. Corp., Wilbert 9	1162	6559
CALCASIEU PARISH—		
Plummer & McDaniels, Couburn-Hood 1, sec 13-10s-12w	*	7378
EVANGELINE PARISH—		
Humble O&R Co., Hattie Haas 1, sec 22-4s-1w	*	8014

*Failures; †Junked; ¶Million cu. ft. gas.

Rodessa Gasoline Plant Capacity Is Increased

Shreveport, La.—Arkansas-Louisiana Gas Company (Cities Service) has increased the capacity of its gasoline extraction plant at Rodessa, Caddo Parish, to 25 million cubic feet of gas daily, with installation of additional units. The former capacity was 15 million feet daily.

North Louisiana Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CADDO PARISH (Pine Island)—		
M. Rodgers, Muslow 4, ne sw 4-20n-15w	35	2145
The Leonard Co., S. P. Harrell 4, se nw sw 2-21n-16w	‡	1075

*Failures; †Junked; ¶Million cu. ft. gas.

Will Deepen DeSoto Parish Wildcat Test

Shreveport, La.—Dempsey and Manziel, whose Thigpen 1, NE SW NE 33-13n-13w, a wildcat in DeSoto Parish, was deepened to 1745 feet in Annona chalk after being treated twice with acid at 1733 feet, with a show of oil, and again treated with acid, have ordered a standard rig for installation at present depth. Elevation is 267 feet.

United Gas Public Service Company is adding to its holdings in the Sligo gas field, Bossier Parish, which now has five producing horizons, last week having paid S. L. Herold and associates $10,800 for a five-year lease on 720 acres in Sections 29 and 31-17n-11w.

Only Two Completions In North Louisiana

Shreveport, La.—Heavy rains that flooded low lands, and the coldest weather in two years, accompanied by several inches of snow in some parts of North Louisiana hampered oil development last week.

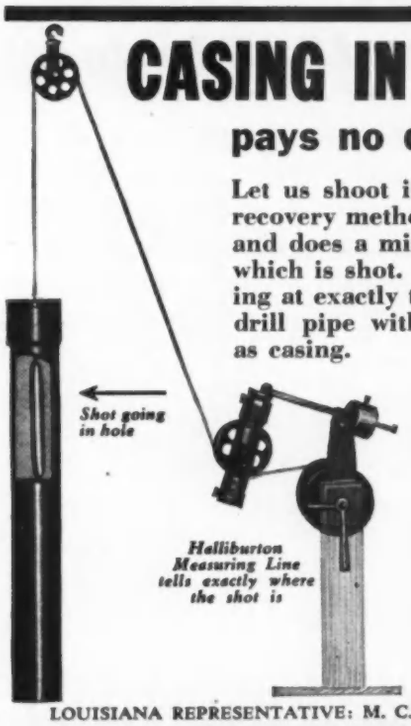
Only two wells were completed, one a 35-barrel pumper in the northeast offshoot of the Pine Islands field, Caddo Parish, and the other, a failure, also in Caddo Parish.

Four new locations were announced, two of them by Arkansas-Louisiana Gas Company (Cities Service). This company erected derrick and is moving in rig for Rodessa Oil and Land Company 2, NE NW SE 23-23n-16w, located 1320 feet north and east of nearest production in the Rodessa gas field, Caddo Parish, which has 16 gassers producing from the Glen Rose at 5500-5850 feet. Thomason Drilling Company will drill the test under contract.

The same company has let contract to Triangle Drilling Company for a test in the Sligo gas field, Bossier Parish, R. O. Roy 1, NW SW 18-17n-11w, where derrick is up and rig is being moved in. This test is half a mile northeast of a gasser completed in the lower Cretaceous at 4200 feet by United Gas Public Service Company.

Five miles northeast of production in the Sugar Creek gas field of Claiborne Parish that produces a heavily saturated gas from Glen Rose oolitic lime at 4400 feet, E. T. Oakes is moving in materials for a 4500-foot test, Patton Estate 1, NW NW NE 1-20n-5w, and expects to spud before February 20th. Oakes has an 11,000-acre block.

The other North Louisiana location last week was Press & Lambert's Hughes 1, SW SE NW 10-20n-15w,



CASING IN 'EMPTY' WELLS
pays no dividends

Let us shoot it loose with this modern pipe recovery method. It's fast, sure, inexpensive, and does a minimum of damage to the joint which is shot. Measuring line permits shooting at exactly the point named. Shoots stuck drill pipe with same ease and effectiveness as casing.

This shooting service is operated in conjunction with H & L Cutting and Pulling tools, making a most complete pipe recovery service.

HALL & LOWREY INCORPORATED
PHONES: OFFICE 222—NIGHT 122—354
GOOSE CREEK, TEXAS, U.S.A.

LOUISIANA REPRESENTATIVE: M. C. WOMACK (PHONE 89) THIBODEAUX, LA.

Caddo Parish, Pine Island, where derrick is up.

A. D. Lynch has assembled a 4,000-acre block of wildcat acreage centering in Section 17-14-16, Caddo Parish, for an early test.

Louisiana Independent Association to Meet

Shreveport, La.—A special meeting of the Louisiana division of the Independent Petroleum Association of America, has been called to be held in Shreveport, Tuesday, January 29, at the Washington-Youree Hotel at 2:30 p. m. by J. P. Evans of Shreveport, director of the Louisiana division. Kenneth L. Stone, chief accountant of the Petroleum Administration Board, will be present to address the meeting, Mr. Evans said.

High Water Inundates Rainbow City Field

El Dorado, Ark.—Several hundred wells in the Smackover and other fields of south Arkansas were inundated by high water last week causing a sharp curtailment of activity in those areas.

The Rainbow City field was among those affected and no completions in that area, now the most active in south Arkansas, were reported. Several wells were at the testing stage when they were shut down due to high water.

Two miles east of production in Rainbow City, Ohio Oil Company after encountering salt water in Sam Oliver 1, NWc SW SW 7-17-13, when plug was drillled and the well tested at 3312 feet, has plugged bottom of the hole and will perforate at 3226 feet.

High Water Slows Arkansas Field Work

El Dorado, Ark.—With South Arkansas experiencing its worst high water in several years which inundated many producing wells as well as many active drilling operations, Arkansas last week reported only two completions, both wildcat abandonments.

Arkansas Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CALHOUN COUNTY—		
R. J. McMurray et al Calion Lbr. Co. 2, se se 33-15-14	‡	3393
OUACHITA COUNTY (Camden)—		
Lovett & Darwin, James Boyd 1, ne ne se 17-13-17	*	1482

*Failures; †Junked; ¶Million cu. ft. gas.

Southeast States Activity Increasing

Jackson, Miss.—Mississippi had no completions last week but had two new locations, one a test for the Jackson gas field's northern edge; Bob Weaver's Trussell & Oparka 1, center NW SW NE 26-6n-1e, on a 10-acre lease assigned for a gas test by Arkansas-Louisiana Gas Company (Cities Service), and the other Gulf Refining Company's Batson-Hatton Lumber Company in the southern part of Forrest County.

United Gas Public Service Company which has large blocks of leases in southeast Mississippi in George and Greene counties, and in Washington County, Alabama, has sent a seismograph crew back to George County to re-check previous geophysical work done several months ago.

After logging 20 feet of broken formation of sand and shale at 986-1006 feet and setting nine-inch casing, a fresh water flow occurred in Ray L. Estabrook's Miller Lumber Company 1, west half west half NE 1-4n-12e, a wildcat in Conecuh County, south Alabama. Efforts are being made to shut off the water to drill deeper.

Wanette Oil and Gas Company is curing title to approximately 30,000 acres in Lamar County, Mississippi, on which it recently drilled four core hole tests. William Burris, who was driller on a test drilled by Khouri et al in Lamar County, is assembling a 10,000-acre block east of Purvis, county seat of Lamar County. The test drilled by Khouri et al was in Section 18-2n-14w.

Acreage rentals on the block held by DeSoto Oil and Gas Company (J. P. Woodward et al) surrounding its Gardner 1, NW NW 22-15s-16w, Lamar County, Alabama, shut down for some time at 4182 feet, was recently paid, indicating that plans will probably be announced soon to deepen the test.

Eleven Permits to Drill in Louisiana

Shreveport, La.—Eleven drilling permits were issued last week by the minerals division of the Louisiana Conservation Commission. Of these four were for North Louisiana divided among the following parishes: Caddo, two; La Salle, one; and Red River, one. The seven in south Louisiana were divided among the following parishes: Calcasieu, two; Cameron, two; and Iberia, three.

Static in Statistics

There has been a lot of static in the statistics of the oil business covering the last five years or so, but with the consumption of refined products now soaring to an all-time peak, things look brighter, what? And the industry has hardly staggered from the very government blows it thought would mean ruination! So what the hell! The PELCO Gang, for one, is all set for a big year. And our customers feel the same way about it. Come on over where everybody knows how to take it.

PELCO

PELICAN WELL TOOL & SUPPLY COMPANY

. . . . SHREVEPORT, LOUISIANA

Lake Charles—Converse—Many
Monroe—Houma—Kilgore
Willow Springs

Northwest Edge Hobbs Well a Good Producer

Hobbs, New Mexico. — Northwest border of the Hobbs field was thrown open for further extensions last week when Amerada Petroleum Corporation and Skelly Oil Company's State 1-E, NEc SW NW 24-18s-37e, recorded a natural flow from lime pay at 4162-4240 feet. Unofficial preliminary gauge credited the well with flowing through open three-inch tubing at rate of 1865 barrels and 1,350,000 cubic feet of gas daily. It will be given the customary acid treatment before proration potential gauge is taken. The hole was carried to a sub sea depth of 560 feet, indicating a safe margin above the water table to justify additional exploration work along the northwest trend.

Deeper drilling on Amerada Petroleum Corporation's State 1-D, C NW NW 1-20s-36e, important wildcat situated about seven miles north of the Eunice field, failed to alter its prospects in proceeding beyond the 3560-foot level late last week. It had previously gauged 7,000,000 cubic feet of gas daily on drill stem test at 3095-3255 feet, with an elevation of 3590 feet. The owners are taking every precaution against gas blowouts, and 11-pound mud is being used for rotary circulation.

Epidemic of gas blowouts that swept the Cooper field recently when five tests were temporarily out of control during a raging sandstorm has branded the area as one of the most treacherous for contractors. Simms Oil Company's Woolworth 1, C SE NE 35-24s-36e, a southeast outpost for the field, was partially out of control overnight when a blowout followed a fishing job at 3406 feet, and threatened to sever all connections at the surface. After replacing the well under control the contractor found drill pipe parted at the 1700-foot level. Work is now in progress in cutting and pulling the remainder of the stem in 500-foot lengths. The Texas Company's I. B. Ogg 2, a northwest diagonial offset, resumed operations after the fire hazard subsided, and tested 20 barrels of oil per hour at 3472 feet, or 186 feet below sea level. The flow dropped to five barrels hourly, and because of the small yield the company is treating the lime horizon with 2,000 gallons of acid. Seven-inch casing was cemented at 3462 feet with a view of excluding all of the big gas, and the carbon dioxide gas, a source of great trouble for operators in freezing gas traps and flow lines.

Humble Oil & Refining Company was confronted with two of the blowouts, but has also restored surface connections. The company's Cooper 3, C SW SE 14-26s-36e, northeast edge location, blew out after drilling to 4194 feet, and plugging back 10 feet because of sulphur water. Escaping gas outside the 9⅝-inch pipe cemented at 2778 feet reached the surface via Continental Oil Company and The California Company's Vaughan 2-14-A, a west offset that was drilling at 1370 feet. The latter was killed with heavy mud and cotton seed hulls, and has since cemented 7⅝-inch pipe with 500 sacks of cement at 1690 feet. Humble Oil & Refining Company's J. L. Coates 1, C NW NE 10-24s-36e, a partially junked gasser at 3355 feet, joined the display of hidden energy in the upper section of the big lime overlying the oil horizon in the field, by stripping its connections. This well has been in difficulty, with carbon dioxide gas production aggravating the situation by freezing tools or pipe lowered in trying to clear the hole of junk, since early last October. A relief well is being started on a nearby location to try and flood the horizons being fed with gas.

An unexpected gas blowout developed in Stanolind Oil & Gas Company's A. E. Meyer 4-A, C NE SW 22-24c-36e, west edge location for the main portion of the Cooper field, while conducting a series of drill stem tests at the 3600-foot level. It has been showing sulphur water with a natural flow of oil, with formation tester utilized in ascertaining whether the water originates from the bottom of the hole, else in porous lime zone a short distance above the oil horizon. Gas broke through from the upper section of the lime, but was lubricated off after applying heavier mud and auxiliary pressure pumps. Meyer 4-A is the lowest well on structure, having topped the brown lime at 3178 feet, or 175 feet above sea level.

Late production gauge of Meyer 4-A credited it with flowing 125 barrels of fluid per hour through tubing with 30 percent water. The hole is bottomed at 3608 feet, and will be cased with seven-inch pipe when more complete data is obtained as to the source of the water. The company's Meyer 5-A, C NW NE same section, showed for a good well when formation tester was used at 3575 feet, or 229 feet below sea level.

Acid treatment converted Continental Oil Company and The California Company's S. J. Wells 2-A-12, C NW NE 12-25s-36e, a northeast extension well for the North Jal field, into a commercial producer after plugging back from bottom-hole water at 3518 to 3489 feet, or 292 feet below sea level. It could not be classed as a producer until treated with 1500 gallons of acid. The well then gauged 240 barrels of oil and 2,700,000 cubic feet of gas daily via casing. The extreme south end of the South Jal district is slated to be tested through a semi-wildcat staked by The Texas Company et al on the Parker Government permit, C SW SW 29-26s-37e. Amerada Petroleum Corporation and Columbian Carbon Company each share a one third interest in this and other government permits held by The Texas Company in the general area.

Failing to respond to two separate acid treatments and a heavy shot of nitro in the 3900-foot horizon, Atlantic Oil Producing Company's State 1-F, C S WSW 29-21s-36e, is destined to become the first dry hole for the Eunice field. Situated on the southeast edge of the structure, the test was drillled into sulphur water at 3976 feet, or 368 feet below sea level, then plugged back to 3967 feet. Peerless Oil & Gas Company's State 1, a north offset, is making an excessive volume of water while showing for a small oil producer at 3974 feet, or 349 feet below sea level. Shell Petroleum Corporation's State-Endura 1, C SE NE 12-21s-35e, tested water when swabbed at 4000 feet, or 412 feet below sea level. It will be plugged back to treat with acid. A commercial gas producer can be had by ripping the pipe near the 3300-foot level. It is about 1½ miles west of nearest production in the Eunice field.

The Texas Company is confronted with another failure as a climax to an exploration campaign conducted for some months on government permits in the North Lea-Lynch district. The company's D. D. Swearingin 1, C NE SW 8-20s-34e, yielded salt water at 3610 feet, or 17 feet above sea level. The hole has since been deepened to 3830 feet with negative results.

Operations have been started on a third wildcat for a single township in western Lea County. Argo Royalty Company is the latest entrant, having moved in materials to drill Byrl A. Burner 1, located 750 feet from the north and 990 feet from the east lines of 6-20s-32e.

Another oil producer for the Maljamar field is in prospect through the Maljamar Oil & Gas Corporation's Baish 4, NEc SE NE 21-17s-32e, having started flowing by heads from lime at 4060 feet.

To Drill Sundance Test at Lance Creek

Lusk, Wyo.—To increase its production in the Lance Creek field, Ohio Oil Company started a deep well to the Sundance formation this week. The company recently contracted with Sinclair-Wyoming Oil Company to deliver 1000 barrels of oil daily from Lance Creek to the Sinclair refinery at Parco, Wyo. The test, Agnes Rohlf 1, NE SE 32-36n-65w, is waiting on cement to set around the 12½-inch surface casing at 200 feet. Argo Oil Company and Continental Oil Company will drill Sundance wells in Lance Creek this year.

South Dome of Oregon Basin Gets New Test

Cody, Wyo.—Rocky Mountain Gas Company, an Ohio Oil Company affiliation, is spudding Oregon Basin Oil & Gas Company 1, SW N W32-51n-100w, on the South Dome of the Oregon Basin field, 15 miles southeast of here, in Park County, Wyo. Company also is laying two miles of 4-inch gathering line to hook up production from Dry Creek Oil Company's gasser in the south fault block area to the Rocky Mountain line from the field to Cody. The gasser, completed early in the fall, proved closure to the south fault block area creating a potential black oil reserve in the deeper Pennsylvanian series.

Large Well Completed In Iles Dome Field

Craig, Colo.—Stanolind Oil & Gas Company made a good oil well completion in Shaw 22, NW SE NW 27-4n-92w, Iles Dome field, northwestern Colorado this week. The well flowed at the rate of 2160 barrels daily at 3423 feet in the Sundance formation. Company is rigging up rotary for Parkinson 35, SEc NE 22-4n-92w. Acreage on the structure is controlled by Stanolind Oil & Gas Company and The Texas Company. Plans for 1935 call for the drilling of at least five wells by the companies. Stanolind is developing Iles production for its affiliated company, Utah Oil & Refining Company of Salt Lake City.

ED LAGUERRE, independent operator of Ariege, France, recently returned to his duties from a vacation in Northern Italy and the French Riviera.

Cold Weather Shuts Down Cut Bank Rigs

Cut Bank, Mont.—Cut Bank activity dropped to its lowest point in two years of development as sub-zero weather closed down all but seven drilling wells in the field. Five of the active tests

Mountain States Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
MONTANA		
BIG HORN COUNTY—		
Enterprise Oil Co. and Embar Drilling Co., Lynde 2, sw nw se 21-6s-35e	*	3621
COLORADO		
MOFFAT COUNTY—		
Stanolind O&G Co., Shaw 22, nw se nw 27-4n-92w	2160	3423
NEW MEXICO		
SAN MIGUEL COUNTY—		
Deason et al, Romerville 1, se sw 14-15n-16e	*	2015
SANTA FE COUNTY—		
Kelsey Clients, State 2, cnw 22-10n-10e	*	1400
TORRENCE COUNTY—		
Sinoco Oil Co., DeHart 2, 12-7n-7e	¶½	1270
LEA COUNTY (Eunice Field)—		
Gypsy Oil Co., State-Bell 2, c se se 8-21s-36e	690	3916
Skelly Oil Co., State 1-B, c nw nw 16-21s-36e	2500	3906
LEA COUNTY (Hobbs Field)—		
Continental Oil Co.-California Co., S. J. Wells 2-A-12, c nw ne 12-25s-36e,	¶2¾-240	3518

*Failures; †Junked; ¶Million cu. ft. gas.

Now Available to the Oil Industry!

A REPORT ON THE PETROLEUM INDUSTRY OF THE UNITED STATES

By STANLEY GILL

A limited edition of this comprehensive study on the curtailment and conservation problem, prepared as a special report for the Cole subcommittee on Petroleum Investigation, has been made available by the author at $10.00 a copy.

ORDER YOUR COPY NOW

Address

GULF PUBLISHING COMPANY

P. O. Box 2811 Houston, Texas

where DRILLING IS TOUGHEST

Statistics prove that »

OSAGE METAL

The Super Diamond Substitute

Gets the job done and is *Economical*

OSAGE

1900 North Eastern Ave. Oklahoma City

OSAGE METAL CO. INC.

are in the town limits. Despite the cold one test started.

Montana Power Gas Company moved rig from its recent completion, State 1, to O'Brien 1, CSE SE 31-34n-5w, and is spudding at 75 feet.

Five wells drilling in town report as follows: Fist et al's Danen 1, lot 10, Section 12-33n-6w, cementing 10¾-inch casing at 596 feet; Hanah-Porter Oil Company's State 1, Lot 18, Section 12-33n-6w, spudding at 100 feet; Marshall et al's Wilkins 1, SE N E12-33n-5w, drilling at 1650 feet; Watson et al's Miller 1, NW NE 1-33n-6w, drilling at 1800 feet; and Wickstrand & Walgren's Simero 1, Lot 5, Section 12-33n-6w, waiting on cement to set around the 10¾-inch casing at 587 feet.

A. B. Cobb's Walburger 4, SE SE 45-45n-6w, drilling at 2720 feet and Bruce Radigan's Tom Connolly 1, SW NW 7-33n-5w, spudding at 150 feet, are the only active tests outside of town limits.

A Bear for Wear
Grizzly Protectors will withstand any blow or strain ordinarily encountered in the hole without slipping. It's the grip that holds.
Fully Covered by Basic Patents
E. M. SMITH COMPANY
600-650 So. Clarence St., Los Angeles, Calif.
Distributors
T. T. WORD SUPPLY COMPANY, Inc., Houston
CONTINENTAL-EMSCO COMPANY, Inc.
30 Rockefeller Plaza, New York
GRIZZLY
DRILL PIPE PROTECTORS

Deeper Zone Sought In Edison Field

Los Angeles.—Ten wells are either drilling or preparing for production tests in the Edison field in Kern County. Eight rigs are up for new wells and two new locations have been announced.

Interest is being shown in Consolidated Crude Corporation's Bloemer-Jeppi 1, Section 17-30-29, which is drilling in gray sand at 4410 feet. String of 12½-inch casing was cemented at 1025 feet and it is seeking the deeper zone.

General Petroleum Corporation's Jed 1 in Section 15-30-29 was placed on the pump with bottom at 2938 feet, but soon sanded up. String of 8⅝-inch pipe had been cemented at 2758 feet and before sanding up, it pumped at the rate of 125 barrels of 16.9 gravity oil, cut 10 percent.

Same company is drilling in oil sand and green shale at its Jed 2 in the same section at 3143 feet, with 11¾-inch pipe set at 1952 feet. General Petroleum has rig up for Knapp 1 in Section 24-30-29.

A. T. Jergins Trust's R. H. Andrews 1 in Section 23-30-29, stopped drilling at 2488 feet and plugged back to 2220 feet, with 8⅝-inch casing cemented at 2020 feet. Perforated pipe, 205 feet, was landed at plugged depth, and well is to be tested for production.

The Texas Company's Seale 4-25 in Section 4-30-29 is being tested after plugging to 3516 feet from 3877 feet. It was perforated at 3460-3516 feet and at 3206-3438 feet and when swabbed showed some 17 gravity oil and water. It will be placed on the pump.

Kern Front Field

Los Angeles.—Kern River Oilfields January 16 spudded the lone new driller in the old Kern Front field in Kern County and the well is being drilled in Section 25-28-27.

This is one of the oldest producing areas in Kern County and until last year several hundred of the old shallow pumpers were shut in, due to lack of demand for the oil. The demand is now showing an increase, and many of the old pumpers are being placed on production.

Potrero Test to Be Drilled Deeper

Los Angeles.—Wilshire Annex Oil Company has decided to drill further into the oil sand at Potrero before making another production test. This hole at 7985 feet was good for some oil of 49 gravity, the well flowing at rates ranging from 40 to 400 barrels. Many efforts failed to make the flow into a continuous process.

Many oil men who have been watching the test are of the opinion that more pay zone must be penetrated before a commercial producer can be expected. Those holding leases in the general vicinity of the deep test are awaiting further developments before starting any activity. But their leases are not for sale.

New Rigs Built at Buena Vista Hills

Los Angeles.—Honolulu Oil Corporation and Standard Oil Company of California are the only two operators going ahead with development work at Buena Vista Hills in Kern County.

Standard Oil Company of California's No. 29-15D is rigging rotary to start drilling in Section 15-32-24. Its No. 19-11D, in Section 19-32-24, is shut down after plugging back to 3503 feet from 3527 feet.

Honolulu Oil Corporation has entered the oil sand in No. 4, Section 14-32-24. Bottom is at 3017 feet and 8⅝-inch pipe has been cemented at 2977 feet. The oil zone was topped at 2989 feet and a production test is next in order. Honolulu has two new rigs up, foundations are in for another and location has been staked for No. 43.

Ojai Well to Be Given Early Testing

Los Angeles.—Continental Oil Company's Pirie 1 in Section 12-4-23, showed for an oil well at 1543 feet, but was killed until tanks could be moved in. This test has been classed as a semi-wildcat at Ojai in Ventura County and was drilled with cable tools.

String of 8¼-inch casing was cemented at 1534 feet, and it started flowing 22 gravity oil when the cement job was being tested. Flow tanks are being erected and a production test is set for an early day.

Midway Field

Los Angeles.—Two wells are drilling and two others are soon to start in the old Midway field in Kern County.

Frank Goldman's No. 1 in Section 22-32-23, is drilling in brown shale at 450 feet and is having water trouble. Hallmark Oil Company's Lakeview 2 after reaching a depth of 2534 feet is trying to plug off water.

Pan American Petroleum Company is grading location for Buena Fe 30 in Section 22-32-23, and Republic Petroleum Company is building rig for No. 39 in Section 8-32-23.

Kern County

Los Angeles.—Two wells are to start at Premier in Kern County. Ohio Oil Company's Midway-Premier 4 in Section 32-27-27, is rigging rotary to start drilling at once, and Fred E. Keeler has staked location for Grimes 3 in the same section.

Potential Gauge Taken On Del Rey Discovery Well

Los Angeles.—Chas. W. Fourl's No. 1, discovery well for the Del Rey field, on a five-day potential test, averaged 5450 barrels, thus giving an authentic figure to supersede former estimates. The well has been cut back to 3450 barrels daily, but official potential will force a further decrease in its production.

Fourl's No. 3 now is drilling at 2110 feet after a start January 11. His No. 2 is building derrick. Big Ben Oil Company's No. 1 first to start drilling after proving of the extension, now is drilling at close to 6100 feet and should pick up the new producing oil sand in a few days.

Union Oil Company's Vidor 6, offsetting the discovery producer, topped the oil sand at 6031 feet, and has cemented 6⅝-inch casing at 5930 feet, with bottom at 6115 feet. Same company's Vidor 7 is drilling slightly below 750 feet.

D. D. Dunlap's No. 1 is making fast time and now is drilling at 4250 feet with 12¾-inch casing set at 750 feet. Mommouth Oil Company's No. 1 test was spudding January 16 and Madison Oil Company's Madison is a rig. Walt Elliott is rigging up to start drilling at once.

New regulations of the city of Los Angeles forbid the drilling of a well within 2500 feet of the ocean and no well can be drilled on a tract of less than one acre.

Fifteen Permits Are Made in California

Los Angeles.—Of the 15 permits filed for new wells in California for the week ending January 12, six were for Los Angeles Basin fields and nine for the San Joaquin Valley, one of which was a wildcat.

Three new wells are to start at Long Beach in the southeast area near the brow of Signal Hill, where a new activity is under way seeking a sand found near the 4200-foot level opened by a recent completion.

One each are starting in the following Valley fields: Midway, Mt. Poso, Poso Creek, Edison, Mountain View, another for Edison and Coalinga. Capitan also gets a new well. One is starting at Huntington Beach and two at Venice, in the Del Rey Hills extension.

A number of redrilling or deepening jobs as filed with the State Mining Bureau is 20 so far in the year, the same as for the same date last year.

Mountain View Deep Test Ready to Proceed

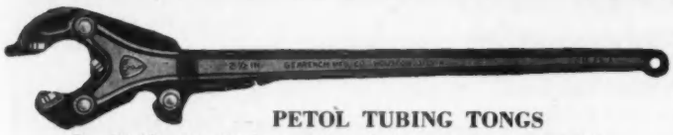
Bakersfield.—Fifteen wells are drilling in the Mountain View field near Bakersfield, and two others are rigging up to start, in addition to four rigs up. Three drilling wells are in the oil sand and are due for early completion.

Barnsdall Oil Company's Young 1 in Section 31-30-29, with bottom at 6975 feet, has recovered stuck drill pipe and is cleaning out to core ahead. This is the deepest hole in the field and is looked upon as the test to find out what is below the present producing zone. No casing has been set since 18⅝-inch casing was cemented at 829 feet.

Hancock Oil Company's Miller 3 in Section 14-30-28, topped the oil sand at 5110 feet and is now drilling in oil sand and shale at 5162 feet. Hancock is starting Miller 4.

A. T. Jergins Trust's Wright-Bloemer 2 in Section 30-30-29, stopped drilling at 5716 feet, cemented 8⅝-inch pipe at 5411 feet and has run the flow string preparatory for a production test. The liner includes 270 feet of perforated.

National Oil Company's Cowan 1 in Section 30-30-29, also is in the oil sand at 5693 feet with 8⅝-inch casing at 5408 feet. Water shutoff is now being tested.



PETOL TUBING TONGS

The World's Favorite Tongs—Safest, Fastest, Strongest made. Well balanced, light, sure-grip. Stabs on jaws automatically engaging. Cam lock permits turning tubing in either direciton, and eliminates tongs coming off.

PETOL FRICTION TONGS

No teeth or bits. Turns job by friction alone. Curved, one-piece jaw protects pipe against damage. Cannot jam or bind. Made in sizes 1" to 8" and special sizes.

2 OF 18 TYPES
2 OF 150 SIZES

GEARENCH MFG. COMPANY
HOUSTON, TEXAS, U. S. A.
"Most Complete Line of Tongs in the World"

"From now on, Jim, put Reading Genuine Puddled Wrought Iron Tubular Goods in all 'hot spots'. That's the pipe that can take it, and it will save us plenty."

Write for details.

READING IRON COMPANY
PHILADELPHIA

SCIENCE AND INVENTION HAVE NEVER FOUND A SATISFACTORY SUBSTITUTE FOR GENUINE PUDDLED WROUGHT IRON

Santa Fe Springs Activity Increasing

Los Angeles.—Field activity is picking up at Santa Fe Springs, after more than two years of practically no drilling.

Union Oil Company now is drilling two wells on its Bell lease. No. 65 is drilling in sand and shale at 4935 feet and No. 72 is drilling in sand at 4310 feet. Union Oil Company has staked locations for eight additional wells to be drilled on this lease.

General Petroleum Corporation is redrilling two holes on its Santa Fe lease, Nos. 36 and 240. Shell Oil Company's G. H. & N. 18 with bottom at 6522 feet is bailing for production. The Texas Company has resumed operations at Patterson 12, suspended since January 1929, and is drilling in sand at 4360 feet.

Santa Fe Extension Oil Company is redrilling Rohde Investment 1.

Twenty-Seven Strings Are Active at Kettleman Hills

Los Angeles.—Union Oil Company has suspended operations for the present on North Kettleman Oil & Gas 1, in Section 24-21-16, outskirt Kettleman Hills test, which reached 10,944 feet where a fishing job developed. This hole was showing both oil and gas when it became necessary to plug back in an effort to sidetrack and redrill.

It is understood it is planned to plug back to about 7500 feet and start on a new hole alongside of the old hole. This test attracted a lot of attention, and for a time was the deepest hole ever drilled in the world. It was more than usually interesting, due to the gas pressure and the showing of oil at this extreme depth.

The other deep Kettleman Hills test, which reached a depth of 10,154 feet when trouble developed, now is redrilling at 9284 feet and making fair progress. This is Kettleman North Dome Association's No. 56-80 in Section 8-22-18.

Twenty-seven strings of tools are active at Kettleman Hills, but most of those near the completion stage are having trouble. Four wells have been swabbed and refused to flow. Two others were wet and had to be recemented.

California Completions

Completion, well and location	Init. Prod. Bbls.	Depth
LONG BEACH—		
Chief Oil Co.'s No. 2	175	4920
SANTA FE SPRINGS—		
Union Oil Co., Alexander 25	300	3740
BUENA VISTA HILLS—		
Standard Oil Co.'s No. 25-15D	490	2940
EDISON—		
Gilco, Inc., Stuart-Gerard 2	110	2259
McKITTRICK—		
Franco-Western Oil Co., No. 11	150	2312
MOUNTAIN VIEW—		
Barnsdall Oil Co., Morris 2	1250	5783
Mohawk Pet. Co., Hood 5	1500	5760
MOUNT POSO—		
Shell Oil Co., Glide 4	625	1824
Shell Oil Co., Vedder 16	180	1770
MESA—		
Crude Oil Dr. Co., No. 2	430	2083
Rio Grande Oil Co., Perkins 4	840	2051
VENTURA AVENUE—		
Associated Oil Co. Lloyd 92	300	6602
Associated Oil Co. V. L. & W. 23	1150	7414
KERN COUNTY—		
Amerada Pet. Corp., Beer 1	*	4251

*Failures; †Junked; ¶Million cu. ft. gas.

Gott WATER CANS & COOLERS
Pure... clear drinking water
The GOTT Water Can is the safe, handy way to keep a fresh supply of pure drinking water always at hand wherever you may be—It's health insurance...your supply store has them. Get one today!
GOTT Water Cans 1 gal. 3 gal. 5 gal. and 10 gal.
GOTT Water Coolers 3 gal. 5 gal. 8 gal. 10 gal. and 20 gal.
Gottkool
H. P. GOTT MFG. CO., Winfield, Kansas
KEEP PURE DRINKING WATER ALWAYS HANDY

Trenton Lime To Be Tested in Livingston

Mt. Pleasant, Mich.—The first Trenton lime test on the Howell structure in Livingston County probably will be made early in February. Talbot Oil Company's McPherson 1, 3n-4e-35, was scheduled to be cased at 4790 feet with 6⅝-inch pipe preparatory to drilling ahead for a Trenton lime test. The objective formation should be encountered in the next 500 feet of drilling.

Drilling operations were delayed the past two weeks on the deep test when a mandrel was caught in 800 feet of liner which was originally run instead of casing.

Since 1915, 22 tests have been completed in Livingston County in an attempt to open commercial oil production. Eight of the tests were abandoned at less than 1000 feet, 11 were abandoned between 1200 and 2000 feet and three were drilled between 2200 and 3600 feet.

Plan Brine Disposal Association at Porter

Mt. Pleasant, Mich.—Preliminary steps for the setting up of a brine association for the Porter (Midland County) area were considered here January 21 by representatives of the state, the Oil and Gas Association and the State Proration Committee.

Brine disposal in this area now is reaching a major problem to operators. Pure Oil Company, major operator in the area, has since last summer, piped brine from its own wells to the Dow Chemical Company plant in Midland, Mich., about 15 miles northeast of the field. Other operators have been pooling or ponding brine, however, this method has not proved entirely satisfactory.

A plan now is under way for all operators to pipe brine from the field to the chemical company with an association setup.

Michigan Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
MIDLAND COUNTY—		
Carter Lease, Inc., Carter 5, 13n-1w, se ne sw-18	60	3420
Pure Oil Co., Naramore 13, 13n-1w, se sw sw-15	50	3440
ISABELLA COUNTY—		
Mammoth Pet. Co., Johnston 1, 15n-3w, ne-e½-nw-33	125	3618
Wittmer Oil Co., Phillips 1, 15n-4w, c-w ne nw-13	35	3685
OGEMAW COUNTY—		
W. J. Sovereign, Golf Club 1, 22n-2e, se se sw-20	20	2710
MUSKEGON COUNTY—		
Reed Oil Co., Paulson-Barlow 3, 10n-16w-8	lcn.	abn.

*Failures; †Junked; ¶Million cu. ft. gas.

Michigan Potential Declines To Revise Proration Rules

Mt. Pleasant, Mich.—Revisions in the present proration schedule now effective in Michigan probably will be authorized by the State Proration Committee for February to bring the program in conformity with increased pipeline runs, a higher federal allocation and decreasing potentials in the Porter pool.

The January proration schedule limits flush wells to seven percent of the potential production in excess of 50 barrels. A 50-barrel exemption applies to all wells in the field.

Oil Administrator Harold L. Ickes notified the committee that Michigan's allocation had been raised from 28,100 barrels daily, now effective, to 30,000 barrels daily, effective for February. James C. Graves, chairman of the State Proration Committee, has asked an increase to 33,000 barrels daily.

While pipeline runs the first week of January averaged only slightly better than 28,000 barrels daily, for the past two weeks the average has been above 30,000 barrels daily with prospects that this will be stepped up to another two or three thousand barrels daily in February. The increase is accounted for chiefly in better marketing conditions for Michigan crude than had prevailed in the late months of 1934.

While runs are being increased, recent checks on potential production of wells in the Porter field (Michigan's major flush area and the only pool in which proration has ever played an important part) show a marked decline. The State Proration Committee showed the entire state potential as of January 1 at 139,062 barrels daily with 125,605 barrels daily from the Porter area. With only a comparatively small amount of new flush production being drilled in during December and January in this area the potential probably will fall to 75,000 barrels or under by the last of February based on the present decline. Of the 289 wells on production probably not more than 50 percent will come under prorate restrictions during February if the exemption figure is boosted to 100 barrels as now under consideration by the committee.

The committee now is considering boosting of the exemption for February to 75 or 100 barrels per well and increasing the percent from 12 to 20 percent.

Michigan State Leases To Be Sold

Mt. Pleasant, Mich.—Approximately 39,500 acres of state owned land will be offered for lease by the Lands Division of the State Conservation Department, February 11, at Lansing. Leases will be offered in 11 counties including 23,590 acres in Gladwin County.

Eastern Field Completions

PENNSYLVANIA

Company, Well and Location	Init. Prod. Bbls.	Depth
Myers Hoskins & Co., M. C. France 1	*	2983
WEST VIRGINIA		
CABELL COUNTY—		
West Virginia Gas Co., S. J. Kendall 1	¶	3335
CALHOUN COUNTY—		
F. F. McIntosh, S. Settle 2	¶	1950
KANAWHA COUNTY—		
Godfrey L. Cabot, Inc., Huntington 48	¶	2670
Winifrede Co., Fee 9	¶	1803
RITCHIE COUNTY—		
Clem S. Morris, Morrie & Carter 1.	¶	1980
Mellon Bros., Conaway-Patton 5....	¶	1916
Clarion O&G Co., Wm. Marbury 1.	¶	....
WOOD COUNTY—		
John E. Yeager & Co., W. B. Wambeley 1	¶	....
WIRT COUNTY—		
Peter Silman, Fee 1	*	....
SOUTHEASTERN OHIO		
NOBLE COUNTY—		
Therman, Root & Channing, H. Murphy 4	2	....
Mercer O&G Co., M. Crum 15.....	*	222
MONROE COUNTY—		
Roy B. Decker & Co., E. S. Jeffers 2	¶	1326
Hendershot & Co., J. H. Shafer 5..	*	....
MORGAN COUNTY—		
Foraker & Co., M. H. Williams 1..	*	1410
WASHINGTON COUNTY—		
Nix Oil Co., R. Haught 1	¶	1725
Schneider Oil Co., W. Covey 4	50	791
Local Oil Co., L. Lorenz 1	*	1074
T. L. Ormiston, T. L. Ormiston 4..	¶	1160
D. T. Orndoff, P. Roe, Jr. 4.....	15	1305
HARRISON COUNTY—		
C. B. Wortsell, J. A. McClain 5....	*	1300
JEFFERSON COUNTY—		
Elliott & Hindman, Johnson Hrs. 1.	*	1475
PERRY COUNTY—		
The Allegheny Co., Monahan 27...	*	1050
CENTRAL OHIO		
ATHENS COUNTY—		
A. D. Townsens, J. H. Hanley 1...	¶	1660
MEDINA COUNTY—		
Oko O&G Co., T. W. Brinker 32...	10	367
E. R. Edison & Son, Sam Hartman 3	*	....
Ohio F. G. Co., L. A. Hauck 1.....	*	....
F. T. Kover 1	*	3395
MUSKINGUM COUNTY—		
Fulk & Standebery, W. W. Baughman 1	20	4062
Fritz O&G Co., W. H. Fletcher 1..	15	4080
HOLMES COUNTY—		
Lydic O&G Co., G. McDowell 1....	¶	962
LICKING COUNTY—		
Preston Oil Co., W. Davidson 3....	36	2980
Settles Oil Co., O. B. Evans 4.....	7	577
KNOX COUNTY—		
Upham Gas Co., J. Henwood 1.....	*	2592
Ohio F. G. Co., H. H. Scott 1	¶	3076
Reed Bros., B. Reed 4	*	....
PERRY COUNTY—		
Hopewell O&G Co., M. Emmerst 5..	¶	2983
GUERNSEY COUNTY—		
Ohio F. G. Co., A. J. Weisher 1...	*	1509
VINTON COUNTY—		
Hazlett & Walters, H. Cecil 1.....	2	454
MEIGS COUNTY—		
Ohio F. G. Co., H. M. Durst 2....	¶	2142
J. J. Ours 1	¶	1932
Rutland Gas Co., L. M. Haley 2....	¶	800
TUSCARAWAS COUNTY—		
C. A. Hardwick, W. Couldon 2.....	*	680
PERRY COUNTY—		
Ohio F. G. Co., B. Shough 2.....	¶	3080

*Failures; †Junked; ¶Million cu. ft. gas.

IF YOU WANT A

WHIPSTOCKING JOB

THAT WILL NOT SHIFT POSITION AND CLOSE THE HOLE . . . A JOB DONE TO PERFECTION . . . USE THE

CORBETT

COMPLETE WHIPSTOCK SERVICE ON YOUR

SIDETRACKING JOBS

Corbett Whipstock Service Assures:

1. A good, clean window 10 to 12 feet long, eliminating the cost of expensive cutting and pulling jobs.
2. Whipstock automatically sets in the collar positively guaranteeing a mill-out between couplings.
3. If hole has deflected, you can, by proper orienting and setting, straighten up in the right direction, or get back to correct position.
4. Non-shifting of position, therefore no closing of hole.

FOR A PERFECT

Whipstocking Job

WRITE OR PHONE:
CAPITOL 5327
LONG DISTANCE 363

NIGHT NUMBERS:
J. B. Gibson.....Taylor 5528
Chas. Wallace.....Lehigh 4682
Roy L. Wimberly.....Taylor 1529
E. W. Willborg.....Preston 7483

The **CORBETT CORPORATION**

General Sales Agents
2418 Winter Street
P. O. Box No. 42
HOUSTON TEXAS

Drilling Reports on Important Wildcats

CALIFORNIA

KERN COUNTY

BUENA VISTA LAKE—Shell Oil Co.'s B.V.A. 1, 9-32-25, dr sand and shale 3732 ft.

CALIENTE—Signal Oil & Gas Co.'s Brown 1, 5-30-30 lcn. S. P. Land Co. 1, 31-29-30, sd 1855 ft.

COMANCHE POINT—Comanche Oil Co.'s No. 1, 15-32-29, sd 4325 ft. Tejon Ridge Oil Co.'s No. 1, 23-32-29, r 1552 ft.

DEVIL'S DEN—Richfield Oil Co.'s Alferitz 2, 14-25-18, coring 1015 ft.

NEAR EDISON—Cara Vel Pet. Corp's No. 1, 19-30-30, td 1910 ft, plug 1510 ft, perf at 1500 ft, bailed water, to pump.

GOULD HILLS—The Texas Co.'s Jared How 1, 29-29-21, dr brown shale 3050 ft.

GREENFIELD—Sea Cliff Oil Co.'s Houghton 1, 7-21-28, sd 650 ft.

KERNELL—Standard Oil Co.'s Guarantee 1, ton 1, 7-31-28, sd 650 ft.

LOST HILLS—Standard Oil Co.'s United 1, 2-26-20, spud 1-16-35.

NEAR MOUNTAIN VIEW—Hogan Pet. Co.'s Symons 1, 4-31-29, fshg 4760 ft.

SEMITROPIC—Standard Oil Co.'s Hill 1, 8-27-23 dr sandy blue shale 2440 ft.

SOUTH DOME — Continental Oil Co.'s Gatchell 28-7, 7-25-20 rur.

TEMBLOR HILLS — Robt. Foster's No. 1, 2-23-22, co 2192 ft.

WHEELER RIDGE—Badger Oil Co.'s El Tejon 1, 31-11-19, td 6229 ft, plug 3870 ft, redr to 3915 ft. Reserve Oil & Gas Co.'s Tejon Ranch 1, 2-10-19, td 580 ft, to set surface pipe.

WEED PATCH—Associated Oil Co.'s Di Giorgio 1, 3-31-29, dr gray sand and shale 5423 ft.

KINGS COUNTY

ALPAUGH—Trico Oil & Gas Co.'s Magee & Stone 3, 36-24-22, spud 1/13.

PYRAMID HILLS—General Pet. Corp's Martin 1, 20-14-18, rig.

TULARE COUNTY

TERRA BELLA—Baker-Grover Co.'s No. 1, 10-23-27, td 1604 ft, wocs 10¾-in csg at 1187 ft.

MISCELLANEOUS

FRESNO COUNTY—The Texas Co.'s Circle 1, 35-20-14, sd 1476 ft.

HUMBOLT COUNTY—The Texas Co.'s Eureka 1, 1-3-2, td 1117 ft, wocs 18⅝-in csg at 1115 ft.

MADERA COUNTY—Pure Oil Co.'s Chowchilla 1, 7-10-14, fsg 8244 ft.

SACRAMENTO COUNTY—Great American Pet. Co.'s Howard 1, 25-2-8, near Clay Station, fsg 2980 ft.

SAN JOAQUIN COUNTY—Amerada Pet. Co.'s F. L. D. 1, 15-2-5, material on lcn.

No reports from tests in Sutter and Tehama Counties.

SANTA BARBARA COUNTY

GOLETA—Shell Oil Co.'s Bishop 1, 20-4-28, dr red shale 6257 ft.

LOMPOC—Lompoc Pet. Co.'s Beauterbough 2, 18-7-34 r 2975 ft.

NAPLES—W. E. Deuel's Hillock 1, 7-4-29, dr red shale 5468 ft.

SUMMERLAND—Ortega Oil Co.'s Williams 1, 16-4-26, td 4583 ft, bailing.

SAN LUIS OBISPO COUNTY

SEE CANYON—Farrell Pet. Co.'s No. 1, 18-31-12, sd 1420 ft.

CHOLAME—Willett Oil Assn's Jack 2, 10-25-15, co 3540 ft.

VENTURA COUNTY

BARDSDALE—El Rancho Oil Co.'s Elkins 1, 9-3-19, rig. Daniel Fisher's Elkins 1, 5-3-19, sd 762 ft.

HOPPER CANYON—Oil Ridge Oil Co.'s Moran 3, 1-4-19, sd 1475 ft.

LAS POSAS—Las Posas Pet. Co.'s Mahan 1, 22-3-20, td 7370 ft, wocs 10¾-in csg 6050 ft.

OJAI—Continental Oil Co.'s Pirie 1, 14-4-23, td 1543 ft, set 8¼-in csg at 1534 ft, started to flow on shutoff test, killed, bldg tanks.

RINCON—Woodrow Pet. Co.'s Woodrow 1, 4-3-24, td 7615 ft, co.

SANTA PAULA—Edw. M. Lesperance's Boosey 1, 31-4-20, td 570 ft, wocs 12¾-in csg at 450 ft. J. W. Mosher's No. 1, 22-4-21, td 2290 ft, sd.

SANTA SUSANA—E. N. Dake's No. 1, 6-2-17, sd 300 ft.

SESPE—Supreme Oil Co.'s No. 1, 1-4-20, rig.

SHIELLS CANYON—The Texas Co.'s Shiells 128, 4-3-19, td 5433 ft, fsh.

ABBREVIATIONS

The following abbreviations, signs, etc., are used in completions and wildcat reports in THE OIL WEEKLY.

* —*dry hole abandoned well.*
‡ —*salt water (completions).*
† —*junked and abandoned.*
¶ —*million feet of gas.*
abd —*abandoned.*
bbls —*barrels.*
br —*building rig.*
b.s. —*basic sediment.*
csg —*casing.*
co —*cleaning out.*
dd —*drilling deeper.*
dk —*derrick.*
dr —*drilling.*
fsg —*fishing.*
ft —*feet.*
hfw —*hole full of water.*
in —*inches.*
lcn —*location.*
m —*milling.*
mim —*moving in materials.*
mit —*moving in tools.*
mot —*milling o tools.*
n, s, e, w, —*north, south, east, west.*
oih —*oil in hole.*
owdd —*old well drilling deeper.*
owpb —*old well plugging back.*
pb —*plugged back or plugging back.*
r —*reaming.*
rog —*rig on the ground.*
rur —*rigging up rotary tools.*
rust —*rigging up standard tools.*
sd —*shut down.*
sdtr —*sidetracking.*
sg —*show gas.*
si —*shut in.*
so —*show oil.*
so & g —*show oil and gas.*
spd —*spudding.*
sr —*straight reaming.*
sw —*salt water.*
td —*total depth.*
ur —*underreaming.*
wih —*water in the hole.*
wo —*workover.*
wocs —*waiting on cement to set.*
wosr —*waiting on standard rig.*

SOUTHERN CALIFORNIA

ATHENS AERA—F. A. Speik's Johnson 1, 2-3-14, dr sand and shale 3560 ft.

ARTESIA—Vanco Dev. Co.'s Millard 1, 25-3-12, rur.

BREA CANYON—Pressel-Perry-Tull's Baird 1, 30-2-9, td 4123 ft, rep equip.

CARBON CANYON—Tehama Pet. Corp's Kramer 1, 33-2-8, td 2698 ft, plug 2380 ft, sd.

CHATSWORTH—Marble Inv. Co.'s Deer Lake 1, 6-2-16, sd 2600 ft.

FAIRVIEW—Explorers Dr. Co.'s Norris 1, 9-6-10, sd 960 ft.

HAWTHORNE—Lennox Oilfields' No. 1, 4-3-14, foundations.

HERMOSA BEACH—Corniel Oil Corp's No. 1, 31-3-14, co 3900 ft. Aron H. Hover's Bryant 1, 31-3-14, td 4200 ft, plug 3940 ft, on pump, sanded up, co.

HUNTINGTON BEACH, on tidelands—Black Eagle Oil Co.'s No. 1-B, permit 194, 32-5-11, td 4702 ft, wocs 5-in csg 4265 ft.

LOS NIETOS—Rex Anglin Dev. Co.'s Fallis 1, 30-2-11, sd 1210 ft.

MANHATTAN BEACH—Bethlehem Explor. Co.'s Martin 1, 30-3-14, td 5304 ft, rur, to redr. Staple Oil Co.'s No. 1, 24-3-15, dr hard shale 7130 ft.

PLACENTIA—Placentia Dev. Co.'s Placentia 1, 35-3-9, td 4250 ft, redr 3180 ft.

PUENTE—N. O. Shivley's Rowland 1, 23-2-10- dr shale 2880 ft.

SAUGUS—Barstow Oil Co.'s Walker 1, 35-5-16, sd 2300 ft. International Oil Developers' Powell 1, 34-5-16, td 4335 ft, 8⅝-in csg 1957 ft, wocs.

SURF—B. & B. Oil Co.'s No. 1, 19-6-10, dr shale 4031 ft.

RIVERSIDE COUNTY—Corona Oil Co.'s Wardlow 1, 27-3-7, rur. Great Coastal Oil Corp's No. 1, 35-5-5, sd 602 ft.

SAN DIEGO COUNTY—E. A. Hargrave's No. 1, 29-15-3, dr hard conglomerate 2300 ft. San Diego Gas & Pet. Corp's No. 1, 32-18-2, td 6333 ft, recovered fish, to dr ahead.

KANSAS

BARBER COUNTY—Southern Drilling Co. et al's Davis 1, sw se ne 13-34s-15w, sd 2960 ft.

BARTON COUNTY—Atlantic Oil Co.'s Vaniman 1, csw ne 15-20s-33w, td 4686 ft, pumped 572 bbls oil 24 hrs, comp. Murphin & Downing's Lanterman 1, nw se 15-19s-11w, pumped 199 bbls oil, comp. Treleaven & Brimm et al's Haas 1, sw sw sw 30-18s-15w, set 6-in csg 3335 ft, co. Darby Pet. Co.'s Jarus 1, nw se ne 16-16s-12w, pumped 596 bbls oil, comp. Lario Oil & Gas Co. et al's Nuss 1, nw sw sw 11-16s-14w, lcn. D. I. Hall et al's Arnold 1, se sw 19-18s-15w, rig. Wolf Creek's Kraft 1, sw sw sw 26-16s-11w, rog. Suppes & Witt's Hayes 1, sw sw sw 6-16s-14w, lcn.

BUTLER COUNTY—Gaines et al's McKinley 1-A, ne sw 19-29s-4e, td 1950 ft, 1000 gals acid & no test.

COWLEY COUNTY—Lassen's Ferguson 1, se nw 21-30s-8e, td 2176 ft, 1000 gals acid & no test.

DICKINSON COUNTY—Dutch Oil Co.'s Phillips 1, cne nw 15-15s-1e, dr 2655 ft.

ELLSWORTH COUNTY—Carter Oil Co et al's Teubner 1, se se nw 26-1s-9w, ru.

HARVEY COUNTY—Cameron, Derby & Trees' Brainard 1, sw se nw 19-24s-2e, spd & sd.

KINGMAN COUNTY—Sam Jarvis et al's Morrissee 1, cse ne 23-30s-10w, rig.

McPHERSON COUNTY—Roth, Farrout et al's Bestwater 1, se sw se 23-20s-1w, water 3430 ft, ur 6-in csg 3469 ft. Lario Oil & Gas Co.'s Schrag 1, nw se sw 22-19s-4w, hfw 2845-60 ft, set 8-in csg 2908 ft, dr 2925 ft. Stafford et al's Krehbiel 1, nw se 27-21s-3w, (owdd) co 2080 ft. Lario O&G Co.'s Base 1, sw sw sw 22-20s-2w, rust 2983 ft.

NESS COUNTY—Texas Co. & Gypsy Oil Co.'s Goodman 1, csw sw 21-19s-23w, fsg 4355 ft.

PRATT COUNTY—Atlantic Oil Co.'s Prentice 1, cse nw 18-28s-14w, dr 3115 ft.

RENO COUNTY—Privett Drilling Co.'s Crotts 1, ne nw ne 27-26s-10w (owdd), sd 3337 ft. Lario Oil & Gas Reserve Development Co.'s Shepherd 1, sw nw 18-22s-5w, hfw 4020-94 ft, run 5-in csg. Johnson & Carey et al's Dyck 1, se ne se 35-22s-5w, dr 3383 ft. Kessler-Thier & Skelley's Bigger 1, ne se sw 29-23s-6w, set 15-in csg 150 ft, wocs.

RICE COUNTY—Yingling et al's Maupin 1, nw sw sw 1-18s-8w, ru to dd. Gypsy Oil Co.'s Dotson 1, sw nw 25-20s-10w, td 3421 ft, D & A. Allison & Fitzwilliams et al's Stumps 1, nw sw 4-18s-10w ru. Foraker-Nickerson et al's Lyon 1, se se ne 27-20s-8w, dr 1660 ft. Vickers Pet. et al's Gouldner 1, se ne nw 16-18-9w, cellar.

ROOKS COUNTY—Stearns-Streeter et al's Hoskins 1, se sw se 34-9s-16w, td 3088 ft.

RUSH COUNTY—Flynn et al's Hartman 1, sw se nw 4-18s-16w, rig. Lario Oil & Gas Co. & Phillips' Benmow 1, nw ne ne 12-17s-19w, dr 3100 ft.

RUSSELL COUNTY—Iario Oil & Gas Co et al's Moore 1, se nw 34-13s-12w, sd 530 ft. J. Brouk & R D Bailey's Kluesner 1, nw se 34-15s-12w, rig. Hartman & Blair's Gurney 1, se nw 23-14s-14w, sg 1685 ft, so & 1 million gas 2363 ft. Wolf Creek et al's Donovan 1, sw sw se 10-15s-15w, set 10-in csg 2175 ft, dr 2350 ft. Hartman & Blair's Sullivan 1, ne ne se 2-14s-15w, set 12-in csg 551 ft, set 10-in csg 937 ft, dr 975 ft. ElDorado Refining Co.'s Walz 1, se ne nw 29-13s-11w, set 10-in csg 2090 ft & sd. Hartman & Blair's Krause 1, ne nw 5-15s-15w, ru. Wolf Creek et al's Penn Mutual 1, sw sw sw 22-15s-15w, cellar. Hartman & Blair's Furthmeyer 1, ne ne ne 1-14s-14w, ru.

SALINE COUNTY—Dieter et al's Herrington 1, ne nw se 3-13s-1w, dr 2325 ft.

SEDGWICK COUNTY—Allison & Fitzwilliams' Struthers 1, ne sw sw 34-28s-2w, fsg 3295 ft. Syndicate Oil & Gas Co. et al's Ratzlaff 1, [illegible] nw 30-26s-2e, sd 3520 ft. Aladdin Petroleum Co.'s D. Lauck 1, se ne nw 21-28s-2e, [illegible] csg 130 ft, dr 720 ft. Magnolia Pet Co.'s Bartholomew 1, se sw 30-27s-4w, so

3195 ft, so 3254-58 ft, so 3276-3312 ft, dr 3510 ft.

SHAWNEE COUNTY—Jim Edwards' Detrick 1, cnw se 21-14s-15e, td 315 ft.

STAFFORD COUNTY—Atlantic Oil Co & Phillips Pet Co.'s Guthrie 1, cnw nw 15-25s-11w, hfw 2570-75 ft, ur 10-in csg 2585 ft. Atlantic Oil Co.'s Hohner 1, nw se se ne 31-23s-14w, dr 2320 ft.

SUMMER COUNTY—Foraker et al's Hiett 1, se sw ne 34-34s-4w, sd 1285 ft. Tom Palmer's Wentworth 1, nw ne 9-35s-2e, sso 2325 ft, 2 bbls water 2325-35 ft, hfw 2365 ft, dr ahead.

TREGO COUNTY—Central Commercial Drilling Co.'s Wagg 1, nw nw se 17-13s-21w, dr 894 ft. A. D. Morton's Jones 1, se se se 20-12s-23w, cellar.

WABAUNSEE COUNTY—Reserve Development Co et al's Moore 1, cnw nw sw 15-13s-12e, cellar.

OKLAHOMA

ATOKA COUNTY—Brookshire et al's Rowland 1, nw ne ne 18-3s-10e, pulled 5-in csg to test shallow sand. H. F. Nichols 1, sw sw nw 32-2s-9e, dr 175 ft.

BECKHAM COUNTY—Schultz & Pois' Van Vactor 1, ne se ne 25-8n-22w, td 1440 ft, D & A. Fred Coogan et al's Shelton 1, sw sw sw 33-10n-25w, td 318 ft.

BRYAN COUNTY—C. B. Welch's M. Collins 1, sw nw 19-8s-8e, ru & sd.

CADDO COUNTY—H. W. Lee et al's Stacey Ferrel 1, sw ne ne 3-6n-13w, dr 1225 ft. Denver P & R Co.'s Noe 1, ne sw sw 34-10n-10w, agitating with mud pump.

CARTER COUNTY—Carter Oil Co.'s Humble-Williams 3, sw ne 27-2s-3w, ru.

CLEVELAND COUNTY—Sinclair Prairie Oil Co.'s Franklin Community 1, se nw se 21-10n-2w, lcn.

COAL COUNTY—W. A. Delaney's Diamond 1, nw nw se 5-1s-8e, dr 1615 ft. J. D. Pettty Oil Co.'s McMillan 1, sw nw ne 16-1s-8e, td 1110 ft, run 6-in csg.

COMANCHE COUNTY—F. F. Stevens' Green 1, se sw 2-1n-13w, dr 1215 ft. H. W. Baker's Miller 1, se sw se ne 22-2n-13w, spd & sd. Henry Rosenthal et al's Au-chi-re-ah 1 "B", nw nw nw 5-1n-9w, rur.

GARVIN COUNTY — National Producing Co.'s Litterell 1, ne ne ne 31-2n-3w, dr 1071 ft. Anderson Kerr Drilling Co.'s Riley 1, se nw 2-4n-1w, dr 2855 ft. George L. Pace's Smith 1, sw sw ne 35-1n-1e, lcn.

GRADY COUNTY—Carter Oil Co. & Magnolia Petroleum Co.'s Harrison 1, cnw nw 28-3n-5w, dr 8880 ft.

HUGHES COUNTY—Freeman et al's Kite 1-A, nw nw ne 8-6n-10e, sd 598 ft. Dandridge & Crane's Mead 1, nw nw ne 17-5n-9e, run 10-in csg 270 ft.

JACKSON COUNTY—Associated Oil Co.'s Williams 1, sw sw sw 19-1s-20w, mach abd. Palo Duro Oil Co.'s Ealum 1, se sw 16-2n-21w, ru mach. D. Scheig's James 1, ne ne ne 23-1n-2w, ru. Associated Oil Co.'s Harrell 1, ne ne se 13-1s-21w, spd & sd. Selby Oil Co.'s R. C. Holt 1, se se sw 15-2n-20w, materials. Petroleum Prod. Co.'s Cole 1, sw sw se 34-2n-20w, mach.

JEFFERSON COUNTY—George Pace et al's M. Jack 1, ne nw nw 10-4s-4w, sd 3032 ft, D & A.

KAY COUNTY—Helmerich-Pane's Crouse 1, cne sw 29-25n-1w, dr 5670 ft. Bay Oil Co.'s Hudson 1, sw ne 14-28n-3e, pd with crushed rock to 3020 ft, run 5-in csg, to cement at 2945 ft. S. R. McCorkle et al's Hermes 1, sw nw 6-26n-4e, fsg 415 ft. Harris-Haun's W. A. Schuessler 1, cnw sw 3-28n-2e, dr 1685 ft. Lancer Oil Corp's Hugo Wilde 1, se nw nw 22-28n-5e, lcn.

KINGFISHER COUNTY—Black Gold Pet. Co.'s Cole 1, csw ne 24-18n-5w, dr 4365 ft.

LINCOLN COUNTY—Derrickson & Reserve Pet's Law 1, se sw ne 25-14n-3e, rog. Sinclair Prairie Oil Co. et al's Dunbar 1, sw ne 25-15n-4w, dr 6802 ft. Sinclair Prairie Oil Co.'s Boland 1, sw sw sw 25-12n-3e, pb 4530 ft, shot perforating gun 4925-40 ft, 600 ft mud & 50 ft oih, rip at 4360 ft, to cement thru csg Charles Balph et al's Young 1, cng nw nw 23-15n-5e, rig.

LOGAN COUNTY—Sinclair Prairie Oil Co.'s School Land 1, se se se 36-17n-1w, flowing 30 min daily averageing 199 bbls oil. Shell Petroleum Corp. et al's Hirzel 1, se sw sw 7-16n-2w, coring 4190 ft. Slick-Urschel's Pennington 1, csw ne 10-16n-1w, cellar & pits. J. C. Shaffer et al's Watson 1, cnw ne 15-15n-4w, cellar. Helmerich-Payne et al's Sturgis 1, se se nw 1-15n-2w, sd 5350 ft.

LOVE COUNTY—Amerada Petroleum Corp. & Stanolind Oil & Gas Co.'s Westheimer & Daube 1, nw se se 27-6s-2e, mim.

MARSHALL COUNTY—Paul R. Robb's Vittetoe 1, cne se 11-5s-4e, dr 4949 ft.

McCURTAIN COUNTY—J. V. Schrivner et al's Central Life Association 1, ne sw sw 24-6s-21e, mach.

MURRAY COUNTY—T. E. Revels' Wolfe 1, ne ne ne 18-1n-2e, sd 2630 ft. Equitable Oil & Gas Co.'s Scott 1, csl n½ nw sw 15-1s-3e, dr 370 ft. Manahan Oil Co.'s Ward 1, ne se nw 18-1s-3e, sd 85 ft. C. P. Williams et al's Singleterry 1, se sw nw 25-2s-3e, mach moved out. Gillette & Kroeger's Robbins 1, ne ne se 31-1n-6e, rog.

NOBLE COUNTY — Marathon Oil Co.'s Gilbert 1, ne ne ne 24-22n-2e, cored 4460-80 ft, set 6 5-7-in csg 4472 ft, wocs.

OKFUSKEE COUNTY — Delton Oil Co.'s Robinson 1, ne ne ne 18-11n-8e, sd 2255 ft. Mid-Continent Pet. Corp's Haney 1, sw se ne 24-12n-8e, coring 3309 ft. Amerada Pet. Corp. et al's Jaynes 1, nw sw 20-10n-10e, dr 2775 ft.

OKLAHOMA COUNTY — Sinclair Prairie Oil Co's Hoyt 1, nw sw ne 5-14n-3e, water 5113 ft, pb 5084 ft, swab 80 bbls oil 10 hrs, to shoot. R. Carl Larkin's Brobine 1, nw ne 33-13n-5w, rig. J. C. Shaffer et al's Bullard 1, sw sw sw 13-13n-2w, dr 6435 ft. Anderson & Kerr et al's Linn 1, sw nw 17-14n-2w, lcn.

OSAGE COUNTY—Peters Pet. Co. & Norbla Oil Co.'s 1, sw sw sw 15-25n-5e, sd 3134 ft.

PAYNE COUNTY — Marathon Oil Co.'s

A recognized, dependable source for

LUBRICANTS

•

SUN OIL COMPANY

Philadelphia, Pa.

Refineries:
Marcus Hook, Pa.
Toledo, Ohio
Yale, Okla.

SUN OILS

Sales Offices
and Warehouses
in more than
100 cities

Makers of Blue Sunoco Motor Fuel

Potts 1, csw sw 27-19n-2e, cored 4516-31 ft, ssg & o, cored 4687-92 ft.

PITTSBURG COUNTY — McAllister Pet. Co.'s Chunn 1, se nw 29-4n-14e, set 12-in csg 1530 ft, collapsed, sd. Hailey et al's Smithson 1, nw nw nw 35-6n-12e, spd & sd. P. H. Gray et al's Lee 1, nw se 12-5n-13e, sd 615 ft.

PONTOTOC COUNTY—J. D. Sledge & Jack Lynch's Thompson 1-A (twin), sw ne sw 1-1n-7e, flow 60 bbls oil, sd 4340 ft. Southern Oil Corp.'s Ladd 1, cnw nw 27-3n-7e, so 1894 ft, sd 2006 ft. Dixie Oil Co.'s Graham 1, sw se sw 13-1n-2e, cored 2500-2507 ft. H. M. Marcum's Magnuson 1, sw se se 23-2n-7e, flow 15 bbls sw per hr, sd 1580 ft. Mudge Oil Co.'s Clampett 1, sw nw nw 10-2n-6e, dr 90 ft. Southern Oil Corp.'s Vierson 1, ne ne se 17-3n-7e, mach.

POTTAWATOMIE COUNTY—Black Gold Pet. Co.'s Bizzell 1, cne nw 15-7n-3e, swab 63 bbls oil 48 hrs, comp. C. W. James et al's Neal 1, nw se sw 4-5n-3e, set 15-in csg 104 ft, dr 1860 ft.

PUSHMATAHA COUNTY—Burk Royalty Co.'s W. A. Gore 1, se nw se 3-1s-20e, sd 1909 ft. William Ungerman et al's Messer 1, se sw sw 35-3s-18e (owdd), dr 2825 ft.

SEMINOLE COUNTY—Verser & Clay's Thomas 1, ne se nw 1-6n-6e, sd 2802 ft. Ray Dorris & J. T. Hall's Dorris 1, se sw 31-10n-7e, sd 280 ft. Wofford Drilling Co.'s Abbott 1, ne ne ne 33-8n-7e, rig. Gypsy Oil Co.'s Grayson 1, sw sw nw 13-6n-5e, so 3668-73 ft, 1000 ft oih 2798-2804 ft, 1 million gas, swab 100 bbls oil 3 hrs. Wofford Drilling Co. et al's Thomas 1, nw nwse 8-6n-7e, dr 630 ft. Atlantic Oil Co.'s Thompson 1-A, sw se se 15-11n-8e, dr 3280 ft. Crabbtree's Chandler 1, ne se sw 4-5n-6e, spd.

STEPHENS COUNTY—Wm. Angel's Johnson 1, ne se 17-1n-8w, td 2473 ft, si. Wm. Angle's Calloway 1, se se ne 17-1n-8w, lcn.

COLORADO

ARCHULETA COUNTY—Oil City Pet. Co.'s Garnett 2-X, lot 3, ne sw 25-33n-52e, sd 970 ft.

PARK COUNTY—South Park Oil Co.'s State 1, se se sw 16-11s-17w, Hartsel anticline, set 10-in csg at 775 ft, dr 810 ft.

PROWERS COUNTY—Trojan Oil & Gas Co.'s Lotus 1, nw ne ne 15-23s-46w, Lamar district, co after fsg 4596 ft.

NEW MEXICO

EDDY COUNTY—Geo. F. Getty Oil Co.'s Andrew Dooley 1, swc nw 24-20s-29e, 6000-ft test, sd 230 ft. Neil Wills et al's Montgomery 1, c s½ sw ne 10-23s-30e, top salt 370 ft, dr salt 3250 ft.

LEA COUNTY—Amerada Pet. Corp.'s State 1-D, c nw nw 1-20s-36e, elev 3590 ft, top anhydrite 960 ft, logged salt 1060-2255 ft, dr lime with sg 3525 ft. Argo Royalty Co.'s Byrl A. Burner-Texas Co. 1, near c ne ne 6-20s-32e, rog. E. B. Guess et al's C. W. Justis 1, swc nw nw 20-25s-37e, sd 1060 ft. R. H. Henderson et al's P. J. Langley 1, c se se 8-25s-37e, sp and sd; Russell-Steele 1, c ne nw 24-20s-33e, elev 3627 ft, set cas 802 ft. Humble O&R Co.'s J. L. Coates 1, c nw ne 10-24s-36e, elev 3383 ft, top brown lime 2995 ft, junked gasser, td 3355 ft, sd for relief well to kill and abn; J. L. Coates 1-A, relief test, rog; Fay M. Saunders 1, c ne ne 4-22s-34e, elev 3641 ft, fsh 490 ft. Maljamar O&G Corp.'s Baish 4, nec se ne 21-17s-32e, elev 4000 ft, flow oil by heads 4060 ft, dr 4075 ft. Nat'l Securities Oil Corp.'s V. Linam 1, nec s½ sw 33-18s-37e, elev 3712 ft, top anhydrite 1580 ft, logged salt 1716-2650 ft, top lime 2956 ft, dr by junk, td 4270 ft. Ryan Consolidated Pet. Corp.'s Acree 1, c ne nw 35-20s-32e, elev 3568 ft, dr 550 ft. Shell Pet. Corp.'s State-Endura 1, c se ne 12-21s-35e, elev 3588 ft, top anhydrite 1453 ft, logged salt 1533-2865 ft, top lime 3020 ft, tested sulphur water 4000 ft, pb to test. The Texas Co.'s Anna C. Moore 1, c nw se 21-20s-32e, elev 3508 ft, dr 1600 ft; D. D. Swearingin 1, c ne sw 8-20s-34e, elev 3627 ft, top anhydrite 1491 ft, salt 1531-3265 ft, top brown lime 3280 ft, tested w at 3610 ft, dr 3828 ft. The Texas Co.-Amerada-Columbian Carbon Co.'s Parker 1, c sw sw 29-26s-37e, lcn. Sam K. Vierson & Brown's W. D. Robinson 1, c nw se 14-11s-32e, elev 4355 ft, rust.

GUADALUPE COUNTY—Cabra Springs Oil & Gas Co.'s V. K. Jones 1, nw ne nw 6-11n-22e, sd 1300 ft, hfw.

McKINLEY COUNTY—Royer Oil Co.'s Santa Fe R. R. Lands 1, nw sw 13-15n-10w, fighting shale cave 650 ft.

SAN MIGUEL COUNTY—Cabra Springs Oil & Gas Co.'s Thompson 1, sw ne ne 22-12n-22e, co after fsg 3803 ft.

MONTANA

BIG HORN COUNTY—Enterprise Oil Co. and Embar Drilling Co.'s Lynde 2, sw nw se 21-6s-35e, d&a 3621 ft.

FERGUS COUNTY—Button Butte Oil & Gas Co.'s Woodward 1, se se sw 20-14n-24e, dr 2050 ft, if nothing of value is discovered within the next 100 ft, hole will be plugged back to test so between 2752-3008 ft, may be treated before avdn.

WYOMING

CARBON COUNTY—Argo Oil Co.'s Union Pacific 1, northeast corner se 5-24n-87w, O'Brien Springs structure, dr 3165 ft. Ohio Oil Co. and California Co.'s Wm. Kyle 1, ne se ne 26-21-n 79w, Big Medicine Bow Structure, dr 3730 ft shale, so 3450 ft. Ohio Oil Co.'s Sid Morris 1, cnw se 6-20n-77w, Diamond Dome, dr 5612 ft shale. Earl W. Reader, Inc.'s Whitford 1, sw se se 24-20n-83w, Overland Dome structure, dr below 2300 ft. Same company's Union Pacific 1, csw sw 19-20n-83w, fsg for parted 4½-in csg with rotary equipment.

CONVERSE COUNTY—Otto Olsen's Test 1, nw 6-32n-74w, Carey Ranch, sd 642 ft. John Ackard's Daniels 1, sw se 17-32n-71w, td 2300 ft, sg and so. R. J. Dilger's Government 1, se ne sw 33-31n-72w, Poison Lake structure, sd temporarily. E. B. Jones' Pittman 1, c ne ne 27-32n-69w, sd 735 ft. Same interests State 1, sw sw sw 16-32n-69w, spd and sd. Wyoming-Southern Oil Co.'s Wisda 1, center sec 27-32n-69w, td 665 ft.

FREEMONT COUNTY—Mid-American Oil Co.'s Government 2, cne sw 14-28n-92w, Sheep Creek structure, dr 1687 ft.

NIOBRARA COUNTY—Inter-State Oil & Refining Co. and Fall River Royalty Co.'s Morrell 1, nw ne se 2-39n-61w, West Mule Creek structure, dr 2060 ft, hole filled 2800 ft with water in sand at 2975 ft.

SHERIDAN COUNTY—Beaver Creek Oil Syndicate's Allison 1, sw se 15-55n-85w, dr at 2650 ft.

WESTON COUNTY—Conway Oil Co.'s Government 1, se se nw 7-41n-60w, Dewey Dome, dr 1215 ft.

MICHIGAN

MIDLAND COUNTY — McClanahan Oil Co.'s Hamlin 1, 14n-2w, sec 29, dr 769 ft. Goll-Graves-Mechling's Oviatt 1, 16n-2e, sec 24, sd 950 ft. Foster & Wicklund's Neal 1, 16n-2w, sec 13, sd 160 ft. Greendale-Lee Oil Co.'s Hitsban 1, 14n-1w, sec 13, sd 2550 ft.

ISABELLA COUNTY—Pen Yan Investment Co.'s Ackerman 1, 16n-4w, sec 12, dr 2300 ft. Michigan Gas & Oil Co.'s Hanson 1, 13n-4w, sec 33, rig. G. G. Hanner's Dargitz 1, 13n-4w, sec 20, sd 335 ft. Pure Oil Co.'s Baker 1, 13n-5w, sec 15, dr 1900 ft.

OGEMAW COUNTY—McClanahan Oil Co.'s Buffalo Ranch 1, 21n-3e, sec 7, dr 450 ft. Lupton Oil Co.'s Rakestraw 1, 24n-3e, sec 35, rig. Patterson & Louis' Price 1, 22n-3e, sec 31, br.

MONTCALM COUNTY—L. E. Duvall's Eiknorch 1, 11n-10w, sec 13, sd 1340 ft. J. W. Leonard's Durbin 1, 10n-5w, sec 11, sd 1270 ft. Golden Oil Co.'s Steffensen 1, 10n-8w, sec 5, rig.

MECOSTA COUNTY—Gordon Oil Co.'s Brisboy 1, 13n-7w, sec 8, dr 1639 ft. Secord Oil Co.'s Van Houghten 1, 13n-7w, sec 35, sd 150 ft. Alma Mecosta Synd.'s Sullivan 1, 14n-8w, sec 19, lcn. Jetter Oil Co.'s Parsley 1, 14n-10w, sec 19, dr 400 ft. Hall Be Oyle Co.'s Henry 1, 13n-8w, sec 1, lcn. Columbia Oil & Gas Co.'s Freeman 1, 13n-8w, c-ne sw-24, lcn. Lake Side Oil Co.'s Dye 1, 15n-8w, sec 23, sp. Jasmid Oil Co.'s Coopersville Bank 1, 13n-10w, c-nw se-22, lcn. Vale and Ward's Flowers 1, 15n-7w, sec 33, sd 347 ft. Sherman Drilling Co.'s Scheibe 1, 15n-7w, sec 13, dr 60 ft. Consumers Royalty Co.'s Case 1, 15n-7w, sec 23, rig.

GLADWIN COUNTY—Roosevelt Oil Co.'s Haviland 1, 17n-2w, sec 4, dr 170 ft. M. F. Whitehill's Spicer 1, 17n-2w, sec 11, br. Sun Oil Co.'s Hines 1, 17n-1w, sec 31, dr 450 ft.

GRATIOT COUNTY — Charles Weller's Baker 1, 9n-3w, nw sw nw, sec 9, br. Newark Oil Co.'s Beck 1, 10n-3w, sec 29, lcn.

SAGINAW COUNTY—Chapin Oil Co.'s Sutlif 1, 9n-1e, sec 16, sd 2550 ft. Great Northern Oil Co.'s Olmstead 1, 13n-3e, sec 23, lcn.

LIVINGSTON COUNTY—Talbot Oil Co.'s McPherson 1, 3n-4e, sec 35, csg 6⅝-in at 4970 ft. H. Snell et al's Zebb 1, 2n-5e, sec 34, sd 5017 ft.

MISCELLANEOUS—Arneac County: McClanahan Oil Co.'s Heath Ranch 1, 19n-3e, sec 31, rig. Alcona County: Black River Oil Co.'s Ranger 1, 28n-9e, sec 22, rig. Allegan County: Bear Creek Dev.'s Fors 1, 3n-14w, sec 29, dr 1550 ft. Huron County: Wallace Markle's Opaka 1, 15n-11e, sec 4, rig. Roscommon County: Black Diamond Oil Co.'s Vaughan 1, 24n-4w, sec 28, fsg 2780 ft. St. Clair County: P. D. Bornman's Boldt 1, 8n-16e, sec 28, rig. Tuscola County: W. F. Wiechers' Gray 1, 12n-8e, sec 8, rig. Kent County: Bryan & Martin's Aldrich 1, 8n-11w, sec 3, dr 1810 ft. Manistee County: T. K. Buazrd's Chamberlin 1, 24n-16w, sec 14, csg 1088 ft. Mason County: Dragoon Dev. Co.'s Young 1, 17n-15w, sec 15, sd 1600 ft.

MISSISSIPI

FORREST COUNTY—Gulf Ref. Co.'s Batson-Hatton Lbr. Co. 1, lcn not given, mim.

HARRISON COUNTY—Gulf Ref. Co.'s Ingram-Day Lbr. Co. 1, se se 22-6s-13w, dr 1790 ft.

ISSAQUENA COUNTY—Pelican Oil & Gasoline Co.'s Martin G. Bender 1, nw nw 11-12n-8w, 7-in OD csg 3079 ft, top gas rock, arr pb, td 3227 ft, red sandy shale.

MONROE COUNTY—P. J. McAlpine et al's Chas. Rye 1, se sw 22-15s-17w, arr shoot formation and test, td 2917 ft. Frank Rye 1, sw ne sw 15-15s-17w, sd 2910 ft. Crook 1, ne ne 4-13s-18w, sd for csg 1514 ft, gummy shale.

MONTGOMERY COUNTY—D. C. Schaffer et al's Fee not given, 31-19-7w, lcn.

SIMPSON COUNTY—Berry Corp.'s J. N. Little 1, ne ne 32-10n-21e, rur.

WASHINGTON COUNTY—Perkins & Dee's Lee 1, 33-15n-8w, arr res 300 ft.

WARREN COUNTY—Harry W. Elliott's R. L. Parker 1 (second hole), rur, old hole 300 ft away junked at 3252 ft.

WINSTON COUNTY—Jack Vale's Moody 1, nw sw 3-13n-14e, co to deepen 770 ft

ALABAMA

BALDWIN COUNTY—Danciger O&R Co.'s U. S. Government 1, Ft. Morgan Reservation (536-ac), rur.

CONECUH COUNTY—Ray L. Estabrook's Miller Lbr. Co. 1, w½ w½ 1-4n-12e, claim sg 986-1006 ft, cemtd 9-in csg 986 ft, dr plug trying shut off fresh water flow to deepen, td 1006 ft, sand and shale.

COVINGTON COUNTY—Geometer Prod. Corp.'s A. B. Culbreth 1, sw sw ne 8-2n-14e, dr 1105 ft.

PIKE COUNTY—Alabama Drilling Co.'s Faulk 1, nw nw 31-11n-21e, rur.

FLORIDA

WALTON COUNTY—Geometer Prod. Co.'s Walton L&T Co. 1, ne ne 10-1s-19w, spd dr 700 ft.

ARKANSAS

ARKANSAS COUNTY—Grand Prairie Dev. Co.'s Fischer 1, nw ne nw 6-6s-4e, sd 1730 ft.

ASHLEY COUNTY—J. D. Houseman et al's Bovine Farms 1, ne ne 1-18n-8w, rur.

LA FAYETTE COUNTY—W. H. Harvey's A. M. Allen 1, ne sw 18-19-24, 2500 ft oih, wosr, td 2781 ft. A. M. Allen 2, se sw 18-19-24, sd 850 ft. R. F. Allen 1, ne se sw 13-19-25, lcn. Kamon & Neely's Red River Lbr. Co. 1, sw sw 26-19-25, rur.

LONOKE COUNTY—J. C. Strahan's Hardin 1, nw nw 18-2s-7w, sd 1340 ft.

MILLER COUNTY—King Oil Corp.'s C. H. Schroder 1, sw ne 24-14-28, claim so 3103 ft, sd 3160 ft.

OUACHITA COUNTY—T. J. Gaughan et

al's M. Bragg 2, nw ne se 25-13-18, dr 1327 ft. Cartier 1, ne sw se 25-13-18, ow abn at 2500 ft, rur to pb and test Nacatosh at 1390 ft, old td 2500 ft. S. J. Carnes' P. Highsmith 1, nw ne nw 25-13-18, spd. L. Caldwell 1, nw nw 12-14-19, 10-in csg 100 ft, sd 900 ft.

UNION COUNTY—Mrs. R. K. Jones' J. Davis 1, nw nw 28-16-14, focs 6⅝-in csg 2746 ft, td 2758 ft. C. H. Murphy's Union Sawmill Co. 1, nw se 29-18-11, dr 2905 ft. Geo. L. Pace's Union Sawmill Co. 1, ne ne sw 24-18-12, dr 1700 ft. Reuter Oil Co., Inc.'s Kinard 1, nw se nw 32-18-14, sd repr pumping unit, td 2189 ft. Vines 2, nw sw se 29-18-14, claim 9 ft oil sand in Nacatosh 2164-73 ft, dr 2190 ft, 6-in csg 2150 ft.

NORTH LOUISIANA

BIENVILLE PARISH—Duncan & Fuller's J. Hutton 1, nw nw 4-18n-7w, elev 233 ft, top Midway 1370 ft, top Saratoga chalk, 2240 ft, dr 2750 ft. Saline Drilling Co.'s Pardee 1, ne ne 27-14n-6w, arr res 2670 ft.

BOSSIER PARISH—Howard & Scott's Sherrill 1, nw sw 13-18n-12w, rur. W. A. Kirklin, Tr.'s Garrett & McKellar 1, se nw nw 3-21n-13w, arr res 50 ft. L. R. Skidmore's Davis 1, se se 12-18n-13w, sd 1015 ft, top Nacatoch cap rock. The Leonard Co.'s Pearson 1, nw se 22-21n-14w, sd 2367 ft.

CADDO PARISH—Ed Bailey's Hartzo 1, ne nw 28-22n-15w, dk. California-Louisiana Dev. Co.'s W. E. Glassell 1, sw sw 29-20n-14w, rur.

CLAIBORNE PARISH—K. C. Bundy et al's J. K. King 1, 12-21n-7w, dk. J. C. King et al's Odis Webb 1, nw nw ne 21-21n-8w, spd. E. T. Oakes' Patton Est. 1, nw nw ne 1-20n-5w, mim.

DE SOTO PARISH—Century Oil & Drilling Corp.'s J. M. Norton 1, sw ne 27-11n-14w, arr res 2600 ft, lime. Dempsey & Manziel's Thigpen 1, ne sw ne 33-13n-13w, wosr to 1745 ft, chalk. E. L. Foster et al's Youngblood 1, ne ne 9-11n-14w, sd 1820 ft. P. G. Frailey et al's J. E. Stell 1, ne ne 5-12n-16w, dk. Leslie Prod. Co.'s J. W. Ramsey 1, se nw 36-11n-11w, sd 200 ft. J. T. McCormick et al's Harris 1, sw se 11-13n-14w, mim.

EAST CARROLL PARISH—Century Oil & Drilling Corp.'s Olivedell Pltg. Co. 1, 56-21n-12e, sd 170 ft.

NATCHITOCHES PARISH—Clyde Creighton's Friedman Est. 1, swc 52-7n-6w, sd 2090 ft. Roy Raines et al's Fee 1, sw sw 28-9n-10w, sd 3145 ft. B. E. Taylor's De Blieux 1, 83-10n-7w, dk. Leslie Prod. Co.'s Tom Moffitt 1, se nw 19-10n-10w, lcn.

RED RIVER PARISH—Sterling O&G Co.'s Long-Bell Lbr. Co. 1, se ne se 19-13n-9w, dr 1165 ft.

LOUISIANA GULF COAST

ACADIA PARISH—Humble's Rice Milling Company 1, s of Crowley field, sec 27-10s-2e, dr shale 7356 ft. Avalon (Superior Oil Prod. Co. & Woodley Pet. Co.) Oil Co.'s Dr. Newman 1, Churchpoint, sec 24-7s-1e, dr shale 7254 ft.

AVOYELLES PARISH—Southern Star Pet. Co.'s I. G. Boyette 1, sec 28-3n-5e, wocs 444 ft.

CALCASIEU PARISH—Gulf Refining Co.'s W. H. Stark et al 1, 6 mi s of Vinton, sec 26-11s-12w, dr shale 2830 ft. Plummer & McDaniel's Couburn-Hood 1, midway between the Edgerly and Vinton field, sec 13-10s-12w, abd 7378 ft. Wheeler Oil Co.'s W. B. Gabbert 1, 7½ mi e of Lake Charles, sec 28-9s-7w, dr shale 7704 ft. Fred Oil Co.'s Faiszt 2, 262 ft e, 83 ft s of NWc of SE¼ of SE¼ of sec 28-8s-10w, 900 ft se of No. 1 lcn.

CAMERON PARISH—The Texas Co.'s Jessen 1, 1 mi s of Calcasieu Lake, sec 24-14s-10w, dr sand 5430 ft.

EVANGELINE PARISH—Humble's Hattie Hass 1, 3 mi nw of Reddell, sec 22-4s-1w, abd 8014 ft.

JEFFERSON PARISH—The Texas Co.'s Bayou St. Denis 1, 6 mi se of Lafitte, sec 19-17s-24e, ru. Strake Oil Corp.'s Calcasieu National Bank 1, 3 mi sw of Woodlawn, sec 12-9s-6w, drill stem stuck 8091 ft.

LA FOURCHE PARISH—Emerald Pet. Co.'s Bowie Lbr. Co. 1, ne of Bayou La Fourche, sec 53-15s-18e, dr shale 7740 ft.

PLAQUEMINES PARISH—E. H. Howe's Buras Levee 1, e side of Vince Dome, sec 26-21s-30e, dr lime 1782 ft.

RAPIDES PARISH—Williams, Terrell & Day's Armstrong 1, 286 ft n and 300 ft w of SEc of sec 24-5n-1w, lcn.

ST. LANDRY PARISH—Bailey Gaunce's Lewis 1, sec 29-6s-5e, sd 2043 ft.

TANGIPAHOA PARISH—R. A. Conklin's Lake Superior Piling Co. 1, sec 19-5s-9e, dr sand 560 ft.

TEXAS GULF COAST

ANGELINA COUNTY—E. B. La Rue's W. D. Ivey 1, near Huntington, Scarborough sur, sd 1373 ft.

BRAZORIA COUNTY — Amerada Pet. Corp.'s Houston Farms Dev. Co. 1, s of Liverpool, Rattlesnake Mound prospect, L. G. Bachelder sur, dr shale 6780 ft. Stanolind O&G Co.'s Steve Paul 1, Hastings area, A. C. H. & B. sur, abstract 462, lot 25, dr shale 820 ft. Same operator's W. J. Miller 1, Hastings area, A. C. H. & B. sur, abstract 462 (39.39-ac), dr plug at 1545 ft.

CHAMBERS COUNTY—Humble O&R Co.'s A. Middleton 1, 6 mi e of Anahuac, H&TC sur, sec 58, sd 4862 ft. Sun Oil Co.'s Hamilton 1, 5 mi sw of Seabreeze, T&NO sur, sec 128, dr shale 7600 ft.

GALVESTON COUNTY — Humble O&R Co.'s Danielsen 1, Dickinson, J. Sellers sur, dr shale 7350 ft. J. E. Sedberry's T. Shaw 1, Levi Jones sur, dr sandy shale 5737 ft.

HARRIS COUNTY—American Liberty Oil Co.'s Graves Est. 1, Bammel, J. W. Bryan sur, abd 6626 ft. Red Bluff Oil Co.'s Seureau 1, w of Red Bluff, Wm. Harris sur, sd 5513 ft. W. U. Paul's House 1, Hale prospect, F. Benson sur, abd 7329 ft. T. S. & F. Oil Co.'s J. B. Hines 1, sw of Lynchburg, A. McCormick sur, dr 3000 ft. Turnbull & Irwin's Brooks Est 1, R. R. Vince sur, dr gumbo 2860 ft. Walter Goldstone et al's Weingarten 1, Ogburn area, H&TC sur, sec 39, blk 2, dr shale 5265 ft. Means & McGehee's Lackner 1, Eureka, H. Rienerman sur, spd.

JEFFERSON COUNTY—Sun Oil Co.'s Hebert & Broussard 1, s of Lovall Lake, B. Blackmon sur, got six months extension of drilling block. Sun Oil Co.'s Long 1, sw of Nome, J. Blair sur, tested salt water after swabbing down to 4000 feet.

LIBERTY COUNTY—Extension Oil Co.'s Lovett 1, sw of Hull field, P. P. Devers sur, sd 4048 ft. Liberty Independent Oil Co.'s J. M. Neal 1, se of Davis Dome, S. Strong sur, sd 3467 ft.

MADISON COUNTY—Texas New York Dev. Co.'s Ferguson State Farms 1, J. H. Pierson sur, abd 2515 ft.

MONTGOMERY COUNTY—R. R. Frankle's C. Neff 1, Splendora, Walker County School Land sur, preparing to core 6017 ft. Reynolds et al's Stewart 1, e of Montgomery, M. Conner sur, sd 5560 ft. Smith & Cooper's J. W. Scott 1, nw part of county, F. B. Wheeler sur, sd 2952 ft.

MATAGORDA COUNTY—Cockburn Oil Co.'s Hawkins 6, Sheppards Mott, D. McCarthy sur, dr shale 5171 ft. H. M. Smith Corp.'s Wadsworth 1, S. R. Fisher sur, dr shale 3420 ft.

POLK COUNTY—Marathon Oil Co.'s A. S. Jones 1, se of Leggette, I. D. Thomas sur, dr 3215 ft.

SAN AUGUSTINE COUNTY—Fidelity Exploration Co.'s Flournoy & Bryan 1, S. P. R. R. Sur. No. 14, no report.

TRINITY COUNTY—Marrs & McLaughlin's R. White 1, Goff sur, sd 1140 ft.

WALKER COUNTY—Seaport Oil Co.'s Russ 1, w of Huntsville, Wm. Hodge sur, sd 2555 ft.

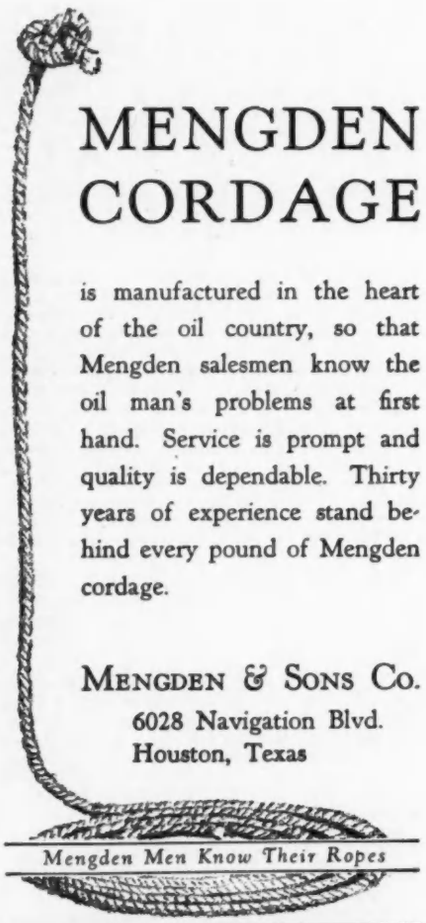
WALLER COUNTY—Smith et al's J. R. Garrett 1, S. M. Williams sur, sd 1650 ft. Stanolind O&G Co.'s Thorp 1, w of Katy, M. Bennett sur, dr sandy shale 7394 ft.

SOUTH TEXAS

BANDERA COUNTY—W. B. Kyle et al's R. L. Ruke 1, J. A. Bennett Sur. No. 7, near Utopia, wost. Peerless O&G Co.'s R. G. Garrison 1, Sec. 506, GC&SF sur, 8 mi sw Medina, rur to dd from 1181 ft.

BASTROP COUNTY—Joe Mills et al's Mrs. W. H. Caldwell 1, J. A. Navarro sur, w Cedar Creek, dr below 1750 ft. Nelson Puett's J. H. Carroll 2, Andrew Mays Sur No. 19, Carroll area, sp.

BEE COUNTY — Earl Callaway's M. H.



MENGDEN CORDAGE

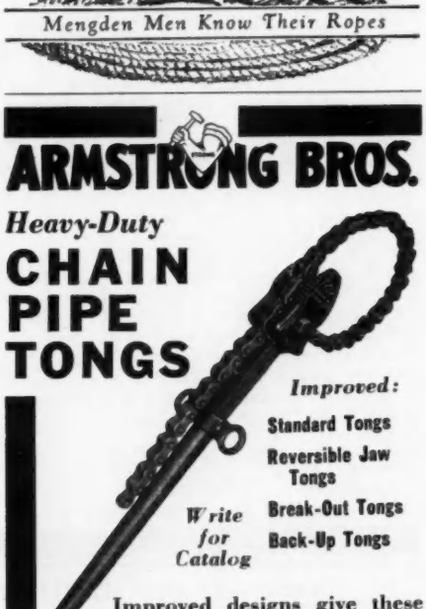
is manufactured in the heart of the oil country, so that Mengden salesmen know the oil man's problems at first hand. Service is prompt and quality is dependable. Thirty years of experience stand behind every pound of Mengden cordage.

MENGDEN & SONS CO.
6028 Navigation Blvd.
Houston, Texas

Mengden Men Know Their Ropes

ARMSTRONG BROS.

Heavy-Duty
CHAIN PIPE TONGS



Improved:
Standard Tongs
Reversible Jaw Tongs
Break-Out Tongs
Back-Up Tongs

Write for Catalog

Improved designs give these tongs greater strength and handiness. *Jaws* are drop forged from special steel; are heat treated, hardened and tested for wearing qualities. *Chains* are proof-tested to 2/3 catalog strength (3,600 to 40,000 lb.). *Handles*, forged from high carbon steel, have both stiffness and "spring". Drop forged Chrome Nickel *Shackel*. Hardened Bolt. Finest tongs made. All sizes.

Write for Catalog.

ARMSTRONG BROS. TOOL CO.
"The Tool Holder People"
299 N. Francisco Avenue,
CHICAGO, U. S. A.

Milster 1, 990 ft el, 4980 ft nl of C. B. McShain sur, Ab 305, ne Dirks pool, lcn. Dorks Bros.' Foley 1, Keeler sur, 2 mi n Friendship pool, re-dr 1659 ft. Cecil Hagen et al's John R. Scott 1, J. M. Uranga Grant, near Normanna, sd 3551 ft. Mid-Continent Oil Co.'s A. J. Kimball 2, S. Winship sur, Grayburg area, td 3550 ft, now coring 3530 ft in sdtr hole. L. W. Stieren's W. H. Fox 1, Wm. McGill sur, n Worth test, dst 3428-36 ft, 375 lbs dry gas pressure 7½ min, core deeper to make new dst. Worth Oil Co.'s Rutledge 1, B. Q. Hadley sur, td 3424 ft, fsh for dst, abt 600 ft stuck near bottom of hole.

BEXAR COUNTY—C. A. Campbell's Margaret Cantu 1, J. M. Arocha sur, near Lone Oak pool, re-dr 580 ft. N. G. Carter's Ruiz 1, F. Rolen sur No. 48, s Von Ormy, trying to test at td 1672 ft. Jones & Keiffer's E. W. LaGrange 1, F. Rolen sur, n Somerset, td 586 ft, prep to set csg to test. McPhee & Briggs' Florence Lamb 1, Manuel de Luna sur 4, td 1065 ft, ru dd. George O'Neill et al's Holly Crouch 1, M. Gctari Sur. No. 5, Sec. 4, sd 1304 ft. Duke Phillips' Anna Lieck 1, J. Lieck sur, e S. A., dr 835 ft. Richcul Oil Co.'s Wm. A. Russell 1, A. Navarro sur, sd 560 ft; Rudolph Vogt 1, S. McCullough sur, w Von Ormy pool, prep to ur; Karl Weilbacher 1, S. Jett sur No. 53, dr 650 ft.

BROOKS COUNTY—Mrs. Florence East's G. Madrigal 2, R. G. Salinas Grant, Share B, dr 250 ft. Helmerich & Payne, Inc.'s, Scott & Hopper 1, Sur No. 44, Palo Blanco Grant, sd 785 ft.

CALDWELL COUNTY — Kurz Oil Prod. Co.'s C. Kurz Ranch 1, Klecamp sur, 4 mi n Thompsonville, td 4104 ft, prep to ru new machy to dd. McNeil Pet. Co.'s J. W. Miears 1, W. C. Swearingen sur, td 2401 ft, dr out plugs, Moseley et al's J. M. Pierce 1, S. Seal sur, sd 2205 ft. R. Y. Walker's J. M. Pierce 1-B, S. Seal sur, dd from 2539 ft.

DE WITT COUNTY—Lefevre & Spice's A. C. Wilkinn 1, 660 ft nl, 420 ft wl of James Ross sur, 3 mi se Westhoff, sp and set sur csg, wocs.

DUVAL COUNTY — Buffalo-Texas Drlg. Synd., Inc.'s Escobar 1, San Francisco Gr., 2 mi s Santa Cruz, sd 3520 ft. Continental Oil Co.'s Clara Driscoll Sevier 4-A, 160 ft wl, 2580 ft nl of Sec 448, lcn. Eckhart & Peacock et al's Southerland 1, Sec. 188, sand 2361-66 ft, set csg, wocs. Humble Oil & Ref. Co.'s Mucio Vela 1, Sec. 42, TT. Ry. sur, sand 2788-96 ft, dst 1000 ft oil, 45 lbs. pressure, ⅜ choke, 20 minutes, wocs. Magnolia Pet. Co.'s Herbst 2, Sec 70, dr 2360 ft; M. Ruiz 1, Sec. 1, SA&MG Ry. sur, dr 2484 ft. W. C. McBride, Inc.'s E. R. Hagist 1-A (replacement hole), Sec. 265, test sw 2165 ft in Government Wells sand, dd. W. L. Pearson et al's Fitzsimmons 1, Sec. 291, dr below 1120 ft. Southwest Drlg. Co.'s Cuellar 1, Sec. 114, td 2750 ft, run electric formation tester. E. R. Thomas' Parr Ranch 1, Sec. 26, dr 3900 ft.

EDWARDS COUNTY—Harry Adams' Hollman 1, Sec. 22, CCSD&RGNG sur, sd 600 ft.

FALLS COUNTY—Davidson et al's Bozeman 1, M. Pryor sur, 6½ mi ne McLellen, sd 1840 ft. C. W. Goeld's W. B. Landrum 1, 1100 ft nwl, 150 ft nel of 1131-ac tr, J. A. Manchaca sur, rog.

FRIO COUNTY—Amerada Pet. Co.'s Halff & Oppenheimer 3, J. H. Gilman Sur. No. 16, Pearsall area, dr below 202 ft sur csg. Shoemaker et al's M. Roach Est. 1, C. Wentzel Sur No. 139, sand 1512-17 ft, sd.

GOLIAD COUNTY—Magnolia Pet. Co.'s V. Albrecht 1, P. Reid sur, 7 mi nw Goliad, dr 5050 ft.

GONZALES COUNTY—Kyle & Van Rossum's W. T. Atkinson 1, 2054 ft nl, 1034 ft el of 185-ac tr in S. Y. Reims sur, 2 mi s Thompsonville, dk.

GUADALUPE COUNTY — Diamond Half Oil Co.'s Aubrey Schmidt 1, Wakefield & Stewart sur, sd 2505 ft; C. Hoffman 1, Wakefield & Stewart sur, dr 2425 ft. A. D. Locke's Mrs. N. S. Lowman 1, Cyrus Campbell League, ru.

HIDALGO COUNTY—Cleary, Spencer & Hood's Brock & Showers 1, Lot 8, Blk 9, Vista Hermosa sub of Por 80, dr 2150 ft. DMC Oil Co.'s Daskam 1, Blk 43, Por 45, dr below 2302 ft. Gato Oil Co.'s Brock & Showers 1, Blk 26, Tr. 8, Por 79, dr 4386 ft. Harrison & Medlin's Garcia Land & Cattle Co. 1, Por 42, 1½ mi e Samfordyce field, top gas sand 2716 ft, core in. King-Wood Oil Co.'s W. M. Doughty 1, Sh 90, San Salvador del Tule Gr., sd 1865 ft for rep to machy; Osca Daskam 1, Lot 23-A, Blk 49, King-Wood sub, Por 41, sd 3514 ft, contract depth. Union Sulphur Co.'s American Rio Grande Land & Irrigation Co. 3, 400 ft sl, 600 ft el of Lot 2082, Blk 86, North Capisallo Dist. Llano Grande Gr., skid dk; John C. Engelman 1, Lot 3, Blk 79, La Mastena Gr., dr 7475 ft.

JIM HOGG COUNTY—B. L. Miller et al's Yeager 1, Blk. 6, sur 20, sp. The Texas Co.'s Gutierrez 1, Sec. 165, dr 3175 ft.

JIM WELLS COUNTY—O. W. Killam's W. D. Wade 4, S. A. Agua Dulce sur, dr 2250 ft. Magnolia Pet. Co.'s A. A. Seeligson 6, 660 ft w, 330 ft s No. 3, Canale Sur No. 218, ru. Maher & Shira's Schaedder 1, S. Bigham sur, ru. Sinclair Prairie O&G Co.'s A. A. Seeligson 1-A, Sec 71, SK&K Sur No. 215, re-dr 2410 ft.

KARNES COUNTY — R. W. Norton & Marr's M. E. Choate 2, sw cor A. Storey 320-ac sur, prep to sp. R. G. Tonkin's Miss Olive Henke 1, Seguin Grant, s Falls City, dr 2680 ft.

KERR COUNTY — Jeff Love & Eastland Oil Co.'s Jeff Love 5-E, Sec. 1591, sd 3530 ft. Meteor Oil Corp.'s Whitworth 1, Sec. 1439, sd 525 ft.

LAVACA COUNTY — Humble Oil & Ref. Co.'s C. S. Wilson 1, J. C. Crenshaw sur, dr 7370 ft.

LEE COUNTY—Humble Oil & Ref. Co.'s J. Simons 1, R. H. Hunter sur, prep to sp. James E. Pederson's C. A. Turner 1, D. Hudson sur, dr 6455 ft.

LIVE OAK COUNTY—Baugh & McMillan's Walton & Campbell 1, D. R. Fant sur, d 1200 ft. Berry-Hayes' C. L. Terrell Est. 1, Walter Henry sur, sp. Brunson et al's Nichols 1, Ayers sur, dr 325 ft. Henderson Coquat's Little 1, M. M. Shipp sur, td 5314 ft, preparing to set csg top Pettus 4987 ft to test. Houston Oil Co.'s Cartwright 30, Sandman sur, dr 1125 ft. Lion Oil Ref. Co.'s McNeill 3, Jane Curry sur, ru. Marine Oil Co.'s Ramage 1, Kivlin sur, dr 5216 ft. Lee McCoy et al's Ross Murray 1, 1000 ft sl, 4900 ft el of J. Hefferman sur, Ab 11, sd 410 ft, gas sand.

McMULLEN COUNTY—Points et al's W. Fahler 1, 2000 ft sl, 2500 ft wl of 1000-ac tr, Pittuck sur, sd 60 ft.

MILAM COUNTY—Second National Bank's B. P. Ward 1, L. Taylor sur, dr 2960 ft.

NUECES COUNTY—Magnolia Pet. Co.'s S. Page 1, Kinney sur No. 586, Sec. 8, sp. United rod. Co.'s M. L. Rivers 1, Chapman Partition, td 4780 ft, dr out plugs; M. L. Rivers 2, 330 ft sl and el 168-ac tr, Chapman Partition, lcn.

REFUGIO COUNTY — Houston Oil Co.'s W. J. J. Heard 18, Refugio town tracts, coring 6325 ft. Magnolia Pet. Co.'s F. B. Rooke 1, Donna A. Reojas sur, dr 5510 ft. Quintana Pet. Co.'s Tom O'Connor 2-B, M. L. White sur, coring 7650 ft. Santa Clara Oil Co.'s Mattie Wood 1, Sec 8, Jose McGehaus sur, made two dst sand 6078-87 ft, both failed, core deeper.

SAN PATRICIO COUNTY — Heep Oil Corp.'s Welder 1-B, Welder town tract at Sinton, dr ahead after setting 1376 ft sur csg. Humble O&R Co.'s Welder 1, Villareal sur, dr 315 ft. Plymouth Oil Co.'s E. H. Welder 2-B, Musquiz sur, se 5975 ft. Stanolind Oil & Gas Co.'s J. J. McMillan 1, 990 ft nl, 165 ft wl of Lot 12, Fulton Pasture sub of P. Fitzsimmons sur, 4 mi w, 1 mi s Sinton, lcn.

STARR COUNTY—Carpenter & Vernon et al's Garcia Land & Cattle Co. 1, Por 100, set 126 ft sur csg, re-dr. John Clopton's Roos et al 1, Por 92, dr 1635 ft. Conroe Drlg. Co.'s Guerra 1, Blk 35, J. N. Crawford sub, Por 65, dr 2000 ft. Conway & Emanuel's Starr County Cattle Co. 1, Por 89, Blk 57, dr 2350 ft. Crawford et al's Hicks-Phelps 1, Pedernal Gr., dr 1500 ft. H. L .Curry's Kelsey Bass 1, Sur 8, Por. 75-76-77, ru. Lester & Duffield, Inc. & R. H. Vice et al's E. B. Carruth et al 1, Share 1-B, Por 91-92, dr 3705 ft. Merren, Johnson & Bond's Starr County Cattle Co. 3, Blk 37, Por 89, attempt dst 2702-9 ft. H. Reed's F. Royono 1, 180 ft nl and el of Blk 6, Por 80, prep to sp. Smith-Tex Oil Co.'s Starr County Cattle Co. 1, 150 ft nl and wl e½ Blk 37, Por 89, lcn. C. L. Smith & Gholston Drlg. Co.'s Longfellow 1, Sec. 281, dr 5125 ft. Dale Sneed's Guerra 1, Share 92, Por 68, dr 100 ft. Sunray Oil Co.'s Sanchez 1, Sec. 344, sand 3665-93 ft, set csg, wocs. E. L. Younkin's' Kelsey Bass 1, Blk 19, Por 87, taken over by Armstrong & Adams to dd from 2572 ft.

TRAVIS COUNTY—J. C. Tittle et al's A. G. Johnson 1, L. Kimbro sur, dr 965 ft.

WEBB COUNTY—Mills Bennett Oil Corp 's Slator 1, Blk 46, Mission Sub of Borrego Gr., sd 1675 ft.

WILLACY COUNTY — South Texas Dev. Co.'s F. Armendiez 1, Share 4, sd 2540 ft.

WILLIAMSON COUNTY—Seggern et al's Clyde Linder 1, S. Woodruf sur, dr 1400 ft.

ZAPATA COUNTY—Cliff Dirks' Hinnant 1, Blk 16, Por 116, coring 1140 ft. Danvers & Harrison's N. J. Vela 1, Blk 7, Vela sub, Por 29, coring 1770 ft. Virginia Hardee's M. D. Slator 1, Blk 65, Mission sub Borrego Gr., sd 21 ft. O. W. Killam's Bruni 9, Blas Uribe Tr, Blk 9, Borrego Gr., coring 1750 ft.

EAST TEXAS

ANDERSON COUNTY—Gulf Prod. Co.'s Mary J. Ross 1 (54.7-ac), R. Erwin sur, Camp Hill area, lcn; M. A. Davey-T. Royall 1 (174-ac), M. Rogers sur, Camp Hill area, elev 572 ft, tested gas in Sub-Clarksville 5045-66 ft, top Woodbine 5176 ft, carrying sw, Georgetown lime 5948-69 ft, pb to 5066 ft to cem 7-in cas 5025 ft. J. W. Luttes et al's C. M. McKee 1 (100-ac), Walter F. Pool sur, 3 mi se of Frankston, dk. Tide Water Oil Co.-Texas Seaboard Oil Co.'s N. N. Wills 21-A, Cayuga field Trinity sand test, dr 2100 ft.

CASS COUNTY—A. D. King, Tr., and E. S.

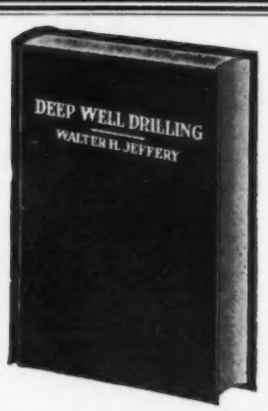
Announcing the **THIRD EDITION**
of the Well Known Book . . .

DEEP WELL DRILLING
by **WALTER H. JEFFERY**

Re-written and revised to date, and enlarged to the addition of the following New Chapters:
GEOPHYSICAL PROSPECTING AND AIR MAPPING.
STRAIGHT HOLE DRILLING AND THE TREATMENT OF CROOKED HOLES.
WATER SUPPLY.
THE GAS-AIR LIFT METHOD OF PRODUCING OIL.
A. P. I. CODES.

Preparatory to writing the new book, the author spent weeks in a first hand study of modern methods of drilling by the rotary system, and of completing wells, controlling high pressures and operating wells in the deep fields of California and Oklahoma.

The third edition contains 816 pages, 150 pages more than the second edition, and 452 illustrations, but the price is the same, $6.00.



Send Check to **GULF PUBLISHING COMPANY**
3301 BUFFALO DRIVE **HOUSTON, TEXAS**

White's G. W. Allday 1 (40-ac), R. E. Whittaker sur, 4 mi ne of Linden, elev 288 ft, dk.

CHEROKEE COUNTY—Jacksonville O&G Corp.'s H. D. Henderson 1 (40-ac), J. Pineda sur, elev 409 ft, sd 693 ft. Killough et al's J. S. Strickland 1 (40-ac), Urian Moore sur, 7 mi nw of Jacksonville, elev 433 ft, sd 3505 ft. H. L. Parsons et al's Southern Pine Lumber Co. 1-A, M. W. Thompson sur, Weches area, Pecan chalk 4165-4600 ft, Austin chalk 5071-5235 ft; top Woodbine sand 5252 ft, dry and abn 5460 ft. Rowan-Nichols Oil Co.-Simms Oil Co.'s C. V. Gilbreath 1 (60-ac), (east) H. H. Brewer sur, 1 mi nw of Reklaw, elev 310 ft, dr 2100 ft. E. M. Thomason & Co., Inc.'s, W. J. Addis 1 (80-ac) Jessie T. Jones sur, elev 471 ft, sd 2150 ft.

FREESTONE COUNTY — Amerada Pet. Corp.'s H. Berk 1, E. C. Rector sur, Cayuga area, rog. F. A. Gillespie & Son's J. B. H. Orand 1 (50-ac), W. M. C. Jones sur, 1¾ mi n of Fairfield, sd 560 ft. W. G. Turbeville and Guy Warren's W. and A. Ivy 1 (95-ac), F. B. Hardy sur A-290, 3 mi s of Turlington, elev 412 ft, Pecan chalk 3022-3165 ft, Austin chalk 4127-4450 ft, top Woodbine sand 4803-4840 ft, sd for dst.

GREGG COUNTY—O. T. Clark et al's T. G. Williams 1 (100-ac), David Hill sur, 3 mi ne of Longview, elev 426 ft, Pecan chalk 2391-2985 ft, sd 2990 ft.

HENDERSON COUNTY—J. C. Crosby and Culp's M. T. Dodd 1 (160-ac), Geo. Aldrich sur, 4 mi e of Malakoff, elev 376 ft, Pecan chalk 2390-2504 ft, Austin chalk 3456-3610 ft, sd 4048 ft. Great State Oil Corp. (Dick Andrade and R. S. Bond's) R. Sid Ansley 1-A, N. B. Thompson sur, elev 268 ft, sd 895 ft. E. B. LaRue and American-Liberty Oil Co.'s Gentry 1, C. M. Walters sur, 1 mi sw of Athens, lcn.

HARRISON COUNTY—Bergendall et al's Buchanan 1, W. M. McIlvain sur, dr sand 3689 ft.

HILL COUNTY—Humble O&R Co.'s Citizens Nat'l Bank (Denison) 1 (170-ac), N. T. Roberts sur, 2½ mi ne of Mount Calm, Austin chalk 581-865 ft, sd 985 ft.

HUNT COUNTY—D. T. Cauble et al's Y. B. Reed 1 (220-ac), F. Thweatt & C. B. Payne sur A-1054, 3 mi se of Greenville, sd 1415 ft. Julian C. Hall et al's A. B. Parrish 1 (100-ac), (S) Nancy Danley sur, lcn. H. G. Samson et al's J. R. Phillips 1 (53 1/3-ac), W. L. James sur, 2½ mi nw of Commerce, rig.

KAUFMAN COUNTY—L. P. Kean et al's J. B. Hunter 1, R. Sowell sur, 4 mi s of Terrell, elev 453 ft, top Austin chalk 1785 ft, sd 2500 ft. G. H. Germany et al's D. Clark 1, S. Edens sur, dr 1730 ft. W. E. Gribbins et al's G. W. Martin 1 (140-ac), W. L. C. Butler sur, 2 mi ne Kemp, sp and sd.

LIMESTONE COUNTY—C. F. Carter et al's S. E. Dean 1 (75-ac), Pedro Varella sur, 3½ mi sw of Mexia, sg 705-11 and 961 ft, sd 1717 ft. David J. Crawford et al's Vol DeLong 1 (59.3-ac), Pedro Varella sur, 2½ mi n of Thelma, base Austin chalk 2450 ft, Woodbine sand and shale 2772-2801 ft, sd for cas. Dan H. Daugherty et al's Sallie Welch 1 (94-ac), Pedro Varella sur, top Nacatoch sand 834 ft, sd 1650 ft. J. Edward Mills et al's J. B. Hunt 1 (34¾-ac), Israel Woods sur, 3 mi ne of Kosse, trace gas 980, 1714 and 2230 ft, dr 2445 ft. Pure Oil Co.'s L. W. Rogers 21-S, Mexia field shallow gas test, dry and abn 810 ft.

MARION COUNTY—Ed S. Holman's Henderson A-1, Bennington sur, sd cur titles, 2105 ft.

MORRIS COUNTY—C. M. "Dad" Joiner et al's Reese 1, T. C. Ry. sur, top Pecan chalk 2000 ft, dr lime 3505 ft.

NAVARRO COUNTY—W. J. Keeling et al's J. F. Rushing 1 (84-ac), Henry Ford sur, 6 mi w of Currie, elev 530 ft, Austin chalk 2155-2995 ft, top Woodbine sand 2858 ft, set 4 3/16-in cas 2864 ft, td 2880 ft. L. N. McCulloch et al's Berry Bros, 1 (35-ac), W. W. Moss sur, sd 625 ft. Syam Oil Co.'s F. Love 1 (300.8-ac), J. L. Strothers sur, Pecan chalk 2206-2320 ft, top Austin chalk 3080 ft, dr 3660 ft.

RED RIVER COUNTY—J. S. Abercrombie & Harrison Oil Co.'s J. M. Roberts 1, John Ware sur, 8 mi n of Clarksville, elev 424 ft, top Woodbine 450 ft, top Georgetown lime 744 ft, dr 1125 ft. J. E. Dinger Oil Co.'s W. T. Morris 1 (351-ac), Joseph Guest sur, 1 mi s of Detroit, dk.

ROBERTSON COUNTY—Steen Drlg. Co. and Dr. W. M. Manness et al's H. A. Sackville 1 (2025-ac), J. M. Viesca sur, dr 2650 ft.

RUSK COUNTY—Ben E. Lamb et al's Haywood Leath 1 (185-ac), L. J. Dooley sur, 2½ mi e of Pirtle, elev 370 ft, Pecan chalk 2418-2793 ft, Austin chalk 3352-3512 ft, testing 3640 ft.

SMITH COUNTY—W. L. Cloud and A. G. Deck et al's Dora Kendall 1, John Williams sur, mi e of Van field, sd 1100 ft.

VAN ZANDT COUNTY—J. C. Acre et al's F. W. Anderson 1 (160-ac), John Blair sur, 4 mi n of Wills Point, sd 2070 ft. American Oil Co.'s J. R. Bryant 1, sd 1325 ft. Roy I. Carter & Jennings' Sallie McGee 4 (43.4-ac), Blk 20, Wm. Daniel sur, elev 441 ft, sd 1268 ft. A. J. Delcambre et al's A. Crim 2 (48-ac), sd 1327 ft. Florence Oil Co.'s Sanger Inv. Co. 1 (50-ac), John Walling sur, sd 3055 ft. S. E. Miller et al's J. M. Palmer 1 (39.1-ac), Blk 14, NCSL sur, co 1150 ft. S. L. Olson, Tr., and Jensen-Olson Oil Co.'s J. D. Listenbee 1 (46-ac), Wm. Daniel sur, elev 448 ft, Nacatoch sand 1260-1279 ft, testing. L. B. Pruitt et al's G. W. Carter 3 (5.87-ac), Wm. Daniel sur, rig. Rauch Bros. (Weltex Oil Corp.'s) Bearden-Palmer 1 (61.1-ac), Blk. 11, NCSL sur, sd 1237 ft. J. K. Wadley et al's W. J. Carnes 1 (588-ac), S. P. Ry. Sur. A-887 and T. P. Ry. sur A-283, base Austin chalk 3721 ft, dr 3880 ft. John D. Wrather et al's G. W. Carter 5 (144-ac), Wm. Daniel sur, tested 50 percent water, pb fr 2970 ft.

WOOD COUNTY—Bryant and Speers' Consumers Lignite Co. 1, F. McMahon sur, 1 mi se of Alba, elev 419 ft, dr 375 ft.

CONSTANT research in field and laboratory, the use of superior crude oils, and the most modern refinery equipment are the three stones in the foundation upon which Humble quality has been built.

HUMBLE
OIL AND REFINING
COMPANY

Producers, Transporters, Refiners and Marketers of Petroleum and Its Products

THE
GUNTER
HOTEL

SAN ANTONIO'S MOST CONVENIENT • HOTEL •

550 COMFORTABLE ROOMS • COURTEOUS EFFICIENT SERVICE AND FINE FOOD IN 3 FINE RESTAURANTS

SENSIBLE RATES FROM $2

PAUL E. McSWEEN
. MANAGER .

NEWS *from the Industry's* EQUIPMENT MAKERS

Hammett Elected Vice President Of Axelson Manufacturing Co.

At the last meeting of the directors of Axelson Manufacturing Company of Los Angeles and St. Louis, D. M. Hammett was appointed vice president of the company.

D. M. HAMMETT

Mr. Hammett, who has served the Axelson organization for many years as manager of their Mid-Continent division, is well known to oil men throughout the east, as well as the west.

Great credit is due Mr. Hammett for the part he has played in building up the sales volume on Axelson pumps and sucker rods throughout the Mid-Continent and eastern territory. It is expected that he will continue to make his headquarters at Tulsa.

K. R. Kightlinger Joins Thermoid Rubber Sales Staff

Thermoid Rubber Company, Trenton, New Jersey, announces the appointment of Karl R. Kightlinger as account executive in their oil field sales organization. Mr. Kightlinger has been an engineer in the oil fields for many years, more recently having spent about five years in the employ of Gatke Corporation.

Miller Fuel Engineering Company New Houston Manufacturer

Miller Fuel Engineering Company, Inc., has been organized to manufacture and distribute a line of boiler specialties designed and developed by M. G. Miller, including gas burners, fuel governors and low water fuel cut-offs.

Headquarters of the new company is 6945 Canal Street, Houston. The executive staff include W. T. Touchton, president; M. G. Miller, vice president and sales manager; W. J. McCaine, secretary-treasurer; and Melvin Inquist, chief engineer.

Howard Stover Heads Tulsa Purchasing Agents Association

Howard F. Stover, purchasing agent for Gaso Pump & Burner Manufacturing Company, was elected president of the Purchasing Agents Association of Tulsa.

Mr. Stover is the first purchasing agent for an equipment manufacturing company to have held this office. He has been a member of the association for ten years, has been active in committee work throughout that period, and was successively second vice-president and first vice president of the organization before being elected as its president.

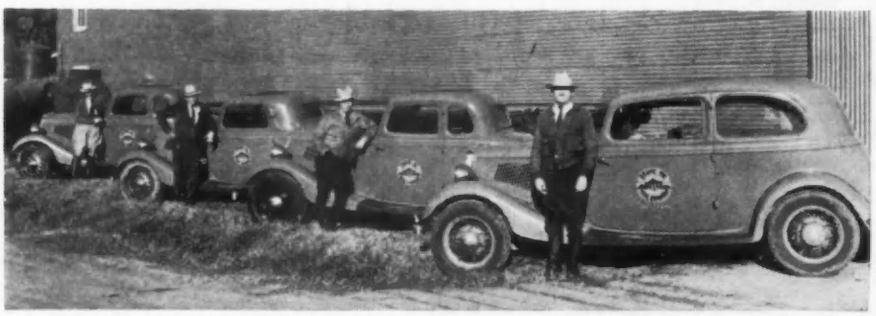
HOWARD F. STOVER

Other officers elected were H. A. Wilson, purchasing agent of Superior Oil Corporation, first vice president; C. M. Taylor, purchasing agent of I. T. I. O., Bartlesville, second vice president; M. F. Bridges, purchasing agent, Tidewater Oil Company, Tulsa, secretary-treasurer. H. M. Cosgrove is executive secretary, and E. R. Welch, assistant secretary of the association.

Ralph H. Clore Becomes Sales Manager for Medart

Effective February 1, Ralph H. Clore will become general sales manager for The Medart Company, St. Louis, Mo. Mr. Clore, formerly general sales manager of United States Electrical Tool Company, succeeds F. P. Kohlbry, resigned.

RALPH H. CLORE



Stone Oil Tool Company's operators of specially designed fishing and cutting tools in Texas and Louisiana. Reading from left to right are Max Prather, Louisiana representative, R. E. (Hays) Morwood, B. M. (Skip) Scivally, and Earl L. Stone, manager.

Squeaks *from the* BULL WHEEL

"So that's what you call the big bull wheel,"
Said little Nellie Frame;
"If I should judge it by its squeal,
Pig wheel would be its name."

Proud Father (to bank manager): "I want to open an account for the new arrival at our house. How shall we distinguish it from mine?"

Manager: "Suppose we call it the Fresh Heir Fund."

"Should I marry a man who lies to me?"

"Lady, do you want to be an old maid?"

The newcomer rapped at the pearly gates, and St. Peter's voice called from within: "Who's there?"

"It is I," answered the newcomer.

"Well, get out of here. We don't want any more school teachers."

A man who called on the relief every week for his groceries, said to the lady: The weather has turned cold and I have got to have some shorts for my pigs.

Lady: Yes, and if I let you have the shorts for the pigs you will come back next week for some step-ins for your cows.

A big man like you might be better occupied than in cruelly catching little fish.

Perhaps you're right. But if this fish had kept his mouth shut he wouldn't be here.

Tom, it's just about a year since our honeymoon, when we spent that glorious day on the sands.

We little thought then that we'd be spending our first anniversary on the rocks.

The best thing that you can do is give up the weed, wine and women.

What's the next best thing?

"What kind of a dress did Betty wear to the party last night?"

"I don't remember. I think it was checked."

"Boy! That must have been a real party."

Tramp: All I ask is to be given work in my line. But I must be provided with the proper equipment.

Citizen: What is your trade?

Tramp: I'm a capitalist.

The novice at fishing had hooked a very small trout on a little lake in the Canadian Wilds. He wound it in excitedly until it was rammed against the end of his rod. Then he turned inquiringly to the guide and said: "What do I do now?"

"Climb up the rod and stab it with your hunting knife!" the guide drawled.

A young naval student was being put through the paces by an old sea captain.

"What would you do if a sudden storm sprang up on the starboard?"

"Throw out an anchor, sir."

"What would you do if another storm sprang up aft?"

"Throw out another anchor, sir."

"And if a terrible storm sprang up forward, what would you do?"

"Throw out another anchor."

"Hold on," said the captain, "where are you getting all your anchors from?"

"From the same place you're getting your storms, sir."

It was a fairly busy time in the outfitting department when a little boy entered and approaching the counter asked the clerk for "a soft man's collar."

The clerk smiled and the customers laughed.

Pointing to his own collar, which happened to be a soft one, the clerk said: "You mean one like this, sonny?"

"No," replied the boy, "I want a clean one."

"Darling, it's you I love. I care for your money only up to a certain point."

"The decimal point?"

"Two pennyworth of bicarbonate of soda for indigestion at this time of night!" cried the infuriated druggist, who had been aroused at 2 a.m., "when a glass of hot water would have done just as well!"

"Weel, weel," returned MacDougal, "I thank ye for the advice, and I'll no bother ye after all. Good night."

The church men's club was being organized. The local butcher was made president, and the grocer's assistant was named as secretary.

"You know how to take the minutes, Luther?" asked the butcher.

"I do that," he replied with a grin.

At the next meeting the president announced that the secretary would read the minutes of the club's first gathering.

The secretary, producing his notes, stood up. "The meeting lasted thirty-five minutes," he said brightly.

A farmer had hired a new assistant, who knew absolutely nothing about farm life.

"Come here," he said. "I'll show you how to milk a cow."

"Don't you think, sir," replied the new one, "that I had better start on a calf?"

William M. Barret, Inc.
Consulting Geophysicists
Specializing in Magnetic Surveys
Contracts accepted for domestic and foreign projects, using the most improved instrumental and interpretative technique.
GIDDENS-LANE BUILDING
SHREVEPORT, LOUISIANA

INDEPENDENT EXPLORATION COMPANY
Seismograph Surveys
2011 Esperson Building
Houston Texas

PATENTS
Patents, Trade Marks, Copyrights and Infringement Litigation
HARDWAY & CATHEY
428-29-30 Bankers Mortgage Bldg.
Phone Fairfax 8232 Houston, Texas

PATENTS
JESSE R. STONE
and **LESTER B. CLARK**
Patents, Infringement Litigation, Trade Marks
Associated with
Andrews, Kelley, Kurth & Campbell
2200 Gulf Bldg. Houston, Texas
Capitol 7245

HIRSCH, SUSMAN AND WESTHEIMER
ATTORNEYS AT LAW
32nd Floor Gulf Building
Houston, Texas
Specializing in Oil Law and Land Law

THE FORT WORTH LABORATORIES
Field Gas Testing. Analysis of oil field brines, gas, minerals and oil. Sell Thermometers, Hydrometers and Laboratory Glassware.
F. B. Porter, B.S., Ch. E., Pres.
R. H. Fash, B.S., Vice-President
828½ Monroe St., Ft. Worth, Tex.

Coming to
PHILADELPHIA?
Rooms with Bath for **$2.50**
HOTEL
PENNSYLVANIA
39TH *and* CHESTNUT STREETS

SPECIALIZED

The OIL WEEKLY solicits and will accept subscriptions only from those who actually are engaged in production and transportation of oil and gas.

RESTRICTED

Advertisers' Index

Abercrombie Pump Co. 119
American Askania Corp. ....
American Association of Petroleum Geologists ....
American Cable Co. ....
American Iron & Machine Works....
American Meter Co. 94
American Roller Bearing Co. ....
American Steel & Wire Co. 75
B. K. Appleman 89
Armstrong Brothers Tool Co. 131
Ash Grove Lime and Portland Cement Co. ....
Athey Truss Wheel Co. ....
Atlas Glycerine Co. ....
Axelson Manufacturing Co. ....

Baash-Ross Tool Co. ....
Badgett Lubrication Corp. ....
Baldwin-Duckworth Chain Corp. ....
Baker Oil Tools, Inc. 3
R. O. Barnsley ....
Baroid Sales Co. ....
The Barrett Co. 43
William M. Barrett, Inc. 136
J. B. Beaird Corp. ....
Black, Sivalls & Bryson 104
Bowen Air Lines ....
Bradford Motor Works ....
Brauer Machine & Supply Co. 112
Brackenridge Chemical Co. ....
The Brewster Co. ....
Bridgeport Machine Co. ....Back Cover
Broderick & Bascom Rope Co. ....
The Buda Co. 96
E. D. Bullard Co. ....
Burlington-Rock Island Railroad ....
Butler Manufacturing Co. ....
A. M. Byers Co. ....
Byron Jackson Co. ....

Cameron Iron Works 46
Caterpillar Tractor Co. ....
The Cavins Company ....
Central Power & Light Co. ....
Chain Belt Co. 83
Chemical Process Corp. 111
Clark Brothers Co. ....
Cleveland Hardware & Forging Co. 4
Climax Engineering Co. ....
Continental Supply Co. ....Insert 71-72
Fred E. Cooper Co. ....
Cooper-Bessemer Corp. 63
The Corbett Corp. 127
W. H. Curtin & Co. 146

Darling Valve & Manufacturing Co. ...
Dayton Rubber Mfg. Co. ....
Diamond Metal Co. 135
Dowell, Inc. ....

Eastman Oil Well Survey Co. ....
E. H. Edwards Co. ....
Economy Electric Lantern Co. ....
Geo. H. Echols ....
Elliott Core Drilling Co. 39
Emsco Derrick & Equipment Co. ....

Geo. E. Failing Supply Co. 79
The Edwin H. Fitler Co. ....
Ford Motor Co. ....
Fort Worth Laboratories 136
Frick-Reid Supply Corp. ....

The Garlock Packing Co. ....
Gas Lift Engineering Co. ....
Gaso Pump & Burner Mfg. Co. ....
Gearench Manufacturing Co. 125
General Electric Co. 85
H. P. Gott Manufacturing Co. 126
B. F. Goodrich Rubber Co. 26-27
Goodyear Tire & Rubber Co. ....
Gray Tool Co. 115
Gray Kerotest 17
The Guiberson Corp. 81
Gulf Publishing Co. ....
Gulf States Utilities Co. 91
Gunter Hotel 133

Hall & Lowrey, Inc. 120
Halliburton Oil Well Cementing Co. ....
Hamilton Brothers 114
Hardway & Cathey 136
Haynes Stellite Co. 23
Hazard Wire Rope Co. ....
C. M. Heeter Sons Co. ....
Hercules Motors Corp. ....
The Hewitt-Kuster Co. ....
Hewitt Rubber Corp. ....
Hirsch, Susman & Westheimer 136
A. F. House ....
Houston Oil Field Material Co. 21
Houston Ready-Cut House Co. 118
Hughes Tool Co. ....Front Cover
Humble Oil & Refining Co. 133
Hyatt Roller Bearing Co. ....
Hydril Co. ....

Independent Exploration Co. 136
Ingersoll-Rand Co. ....
International Cement Corp. ....
International Derrick & Equipment Co. ...
International Harvester Co. 41
International Nickel Co. ....

Byron Jackson Co. ....
Jarecki Manufacturing Co. ....
W. P. Jenny ....
Jensen Brothers Manufacturing So. ....
S. M. Jones Co. ....
Jones & Laughlin Steel Corp. ....

Kerotest Manufacturing Co. 98
Kibele Manufacturing Co. ....
Kobe, Inc. ....

Landis Machine Co. ....
Larkin Packer Co. ....Third Cover
Layne & Bowler Co. 76
The Lane Wells Co. ....
Lincoln Electric Co. 67
Link Belt Co. ....
Ludlow Valve Manufacturing Co. ....
Lufkin Foundry & Machine Co. 65

MacClatchie Manufacturing Co. ....
Maloney Tank Mfg. Co. 61
Martin-Decker Corp. ....
F. G. Masquelette & Co. 110
J. H. McEvoy & Co. 87
Mengden & Sons Co. 131
Geo. S. Mepham Co. ....
Merchants Photo Service ....
Merco Nordstrom Valve Co. ....Second Cover
Miller Sand Pump Co. 109
Mission Manufacturing Co. 18
Lee C. Moore & Co. ....
Muskogee Iron Works ....

National Bank of Tulsa 24
The National Supply Co. ....
The New Deal Specialty Co. ....
Norvell-Wilder Supply Co. 29

Oil Center Tool Co. 113
Oil City Brass Works ....
Oil Development Co. ....
Oil Equipment and Engineering Exposition 37
The Oil Well Improvements Co. ....
Oil Well Supply Co. ....
Oklahoma Gas & Electric Co. ....
Operation Engineers, Inc. ....
Osage Metal Co. 123
Oster-Williams .. ....

The Parkersburg Rig & Reel Co. 6
Pelican Well Tool & Supply Co. 121
Hotel Pennsylvania 136
Petroleum Iron Works ....
Petroleum Rectifying Co. ....
Pittsburgh Equitable Meter Co. ....
Pittsburgh Steel Co. ....
Portable Rig Co. ....

Raybestos Manhattan, Inc. ....
Reading Iron Co. 125
Reed Roller Bit Co. ....Insert 51 to 54
Reagan Forge & Engineering Co. ....
Republic Portland Cement Co. ....
Republic Steel Corp. ....
The Republic Rubber Co. 33
Ridge Tool Co. ....

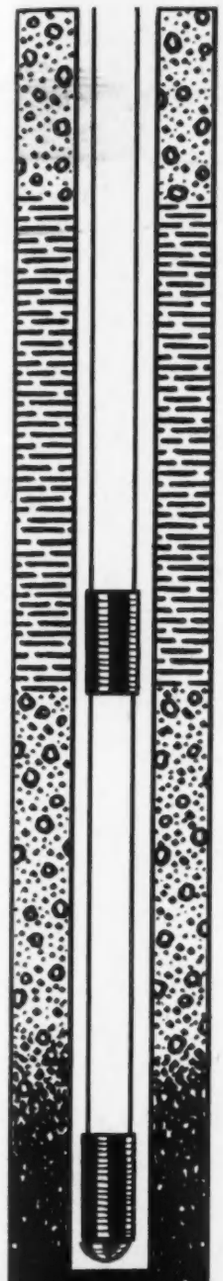
Scandinavia Belting Co. ....
Shell Union Oil Corp. ....
SKF Industries, Inc. 59
South Chester Tube Co. ....
Southern Pacific Lines ....
Southwestern Machine & Supply Co. ....
E. M. Smith Co. 124
Howard Smith Co. 117
Sperry-Sun Well Surveying Co. 42
Jesse R. Stone and Lester B. Clark....136
Stone Oil Tool Co. ....
Sun Oil Co. 129
Supplementary Code Authority of the Wire Rope Industry ....

Texas Electric Service Co. ....
Texas Iron Works ....
Texas Rubber & Specialty Corp. ....
Texas Power & Light Co. ....
Thermoid Rubber Co. 15
The Toledo Pipe Threading Machine Co.
Tretolite Co. 13
Tulsa Chamber of Commerce ....
Twin Disc Clutch Co. ....

United States Rubber Co. ....
Union Carbide & Carbon Corp. 23
Union Wire Rope Co. ....

Vellumoid Co. ....

Waukesha Motor Co. 57
Western Pneumatic Co. ....
Wickwire-Spencer Steel Co. 69
Williamsport Wire Rope Co. ....
J. M. Williams & Co. ....
Wilson-Snyder Manufacturing Co. 30-31
Wilson Supply Co. ....
WKM Co. ....
Wyatt Metal & Boiler Works ....
Youngstown Sheet & Tube Co. ...Insert 71-72



RED CONCRETE
in Larkin Float Collars

Helpful New Idea Heartily Welcomed by Leading Operators!

OUR recent announcement that all concrete parts of Larkin Float Shoes, Float Collars and Guide Shoes are now made of ***red concrete***, has met with marked enthusiasm. One operator who immediately tested the improved products said, "It's a great idea. The drillings that came up were plainly red, which told us exactly where we were!"

Larkin Float Collars, equipped with Bakelite Concrete Valve, have other tried-and-proved advantages. Even with our former ***square*** wickers, under actual tests performed by Robert W. Hunt Company, Engineers, resistance ranging from 5400 to 6200 pounds per square inch was demonstrated.

Now we offer you a new and greatly improved design of wicker (see illustration at right). These new wickers not only have the same shearing resistance as heretofore, but in addition, they possess ***maximum compressive resistance.***

Larkin Float Collars, with these two new features—improved wickers and red concrete—are the very last word in efficiency and dependability. Yet they cost no more than ordinary kinds. Try them!

At All Supply Stores
Warehouse stock at Houston, Texas, Tulsa, Okla., and in East Texas

LARKIN PACKER COMPANY, ST. LOUIS

All Concrete Parts of Larkin Float Shoes, Float Collars and Guide Shoes Now Made of Red Concrete!

LARKIN PACKER CO.

The FIRST COST is the ONLY COST

. FOR A LONG TIME when

BRIDGEPORT DOUBLE 3-POINT ROTARY REAMERS are used

• Pictured here is a Model "A" Double 3-Point Bridgeport Rotary Reamer that has just had its first joint turned after having been used on 8 Kansas and Oklahoma wells. This tool has been used on wells ranging in depth from 3,500 to 4,500 feet. During this service there has been no repair costs on the body—the only expense being for a few sets of cutters.

• This is not an unusual record for Bridgeport Rotary Reamers —in many territories where the work is less difficult both cutter and body repair costs are even less.

• Built to rent as well as to sell, Bridgeport Rotary Reamers are designed to give maximum service at minimum operating costs.

To purchase or rent Bridgeport Rotary Reamers, telephone our nearest Branch Store "station to station" day or night

STOCKS and SERVICE

BRIDGEPORT

MACHINE COMPANY

MANUFACTURERS DISTRIBUTORS

OIL DRILLING-FISHING AND PRODUCTION EQUIPMENT

GENERAL OFFICE AND WORKS: WICHITA, KANSAS

HOUSTON - DALLAS - TULSA - OKLA. CITY - PAMPA - McPHERSON - RUSSELL and BRANCH STORES

National Tube Co. Tubular Products - American Wire Lines - Jones Rods - Aquagel and Baroid Drilling Muds - Jensen Jacks - Hughes Rotary Specialties - Reed Rotary Specialties - Used Equipment - Swan Underreamers - Rental Service - Etc.